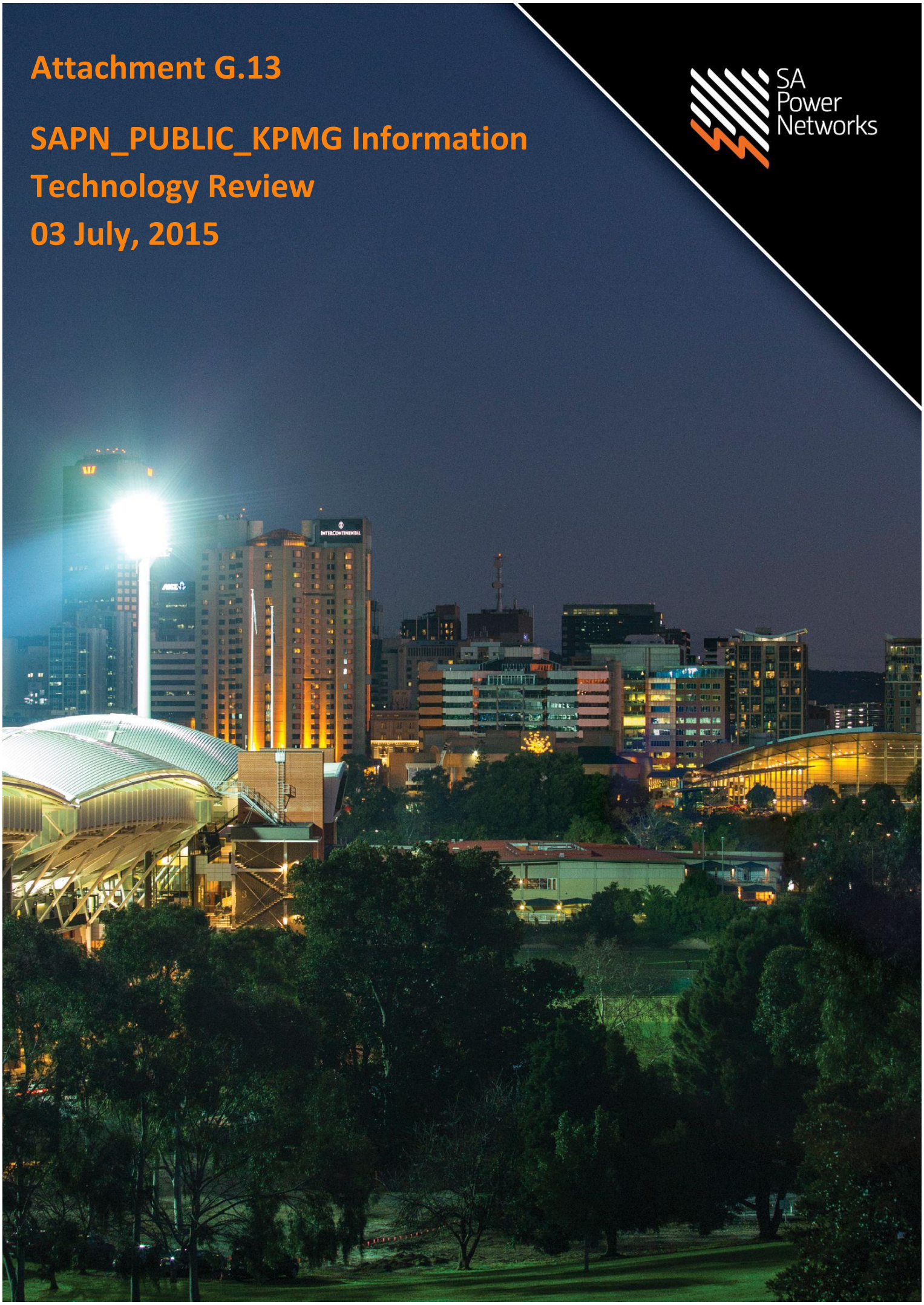


Attachment G.13

SAPN_PUBLIC_KPMG Information

Technology Review

03 July, 2015





cutting through complexity

Independent assessment of the revised 2015-20 Regulatory Technology Submission

SA Power Networks

July 2015

Advisory

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Abbreviations

Abbreviations	
Term	Definition
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
Capex	Capital expenditure
CPI	Consumer price index
DNSP	Distributed network Service Provider
FTE	Full time Equivalent - Unit that measures the workload of an employed person
IRR	Internal Rate of Return
NEL	National Electricity Law
NER	National Electricity Rules
NPV	Net present value
Opex	Operating Expenditure
Price escalators	Factor applied to current/actual cost to consider expected changes in the cost or price of specific goods or services brought about by factors such as CPI.
PI	Profitability Index
ROI	Return on Investment
SCADA	System Control and Data Acquisition
Totex	Total Expenditure - Capital plus Operating Expenditure

1 Executive Summary

1.1 Preliminary decision

In October 2014, SA Power Networks submitted a proposal to the AER for the regulatory control period (RCP) 2015-2020. This proposal included IT operating and capital expenditure which, in the latter case, was a significant increase in that allowed in the current RCP.

Table 1: Original IT Proposal

Cost	Proposal \$m (Real \$June 2015)	Preliminary Decision \$m (Real \$June 2015)
Opex – Base	129.5	129.5
Opex – Step Change	43.9	-
TOTAL OPEX	173.4	129.5
Capex – Recurrent	126.0	126.0
Capex – Non-recurrent (incl. business change)	227.7	87.6
TOTAL CAPEX	353.7	213.6

In its preliminary decision the AER disallowed all the proposed Opex step changes and significantly cut back the Non-recurrent Capex with a reduction of approximately 62%. The primary reasons provided by the AER for not allowing this expenditure were:

Opex Step Change

- Some of the related Capex was aimed at achieving efficiencies so Opex should not go up
- Costs were related to existing or unclearly identified compliance obligations
- Costs associated with replacement of systems shouldn't require an increase
- The Rate of Change approach already compensates for the increased costs, and
- The case made for the increased funding was not clearly articulated.

Non-recurrent Capex

- SA Power Networks was not capable of delivering the scale and complexity of the changes proposed
- The overall program was not prudent given the risks associated with its delivery, and
- The program had not been adequately justified economically.

1.2 Revised IT Proposal

In putting forward a revised proposal for IT Opex and Capex, SA Power Networks has explicitly responded to each observation made by the AER and provided either additional information or revised the approach being proposed.

Table 2: Revised IT Proposal

Cost	Original Proposal \$m (Real \$June 2015)	Revised Proposal \$m (Real \$June 2015)	Change
Opex – Base	129.5	129.5	-
Opex – Step Change	43.9	19.4	(56.0%)
TOTAL OPEX	173.4	148.9	(10.5%)
Capex – Recurrent	126.0	130.2	3.3%
Capex – Non-recurrent (incl. business change)	227.7	169.5	(35.6%)
TOTAL CAPEX	353.7	299.7	(15.3%)

The key justifications being used by SA Power Networks in their revised IT submission are:

- The reduced program is deliverable as evidenced by current period delivery performance and improvements (ongoing) in outsource provider/vendor management processes and project governance structures
- A prudent reassessment of business priorities and timeframes has allowed the program to be extended well into the following RCP
- Focus on projects addressing the highest business risks and the highest business priorities based on regulatory obligations
- Only key Opex step changes related to the proposed projects are being requested, and
- An updated understanding of specific regulatory obligations has enabled a realignment of relevant projects to these requirements and a reassessment of their efficient costs.

1.3 Report scope

KPMG has been requested to provide an independent report on the revised IT expenditure proposal, focussing specifically on SA Power Networks' responses to the AER's comments on the original submission. In this report we have assessed the arguments and additional supporting evidence put forward by SA Power Networks in relation to:

- Deliverability (section 2)
- The scale of the overall IT Capex program (section 3), and
- The proposed IT Opex step change (section 4).

In addition to commenting on the broad response to the AER's preliminary decision, we have also specifically considered the updated approach being adopted for the Enterprise Asset Management (EAM) and RIN reporting projects, and the arguments being put forward in support of this expenditure (section 5).

1.4 Summary of findings

Deliverability

Overall we have found the arguments put forward by SA Power Networks as to their capability to deliver the revised IT capital program to be well supported. Improved and improving maturity in a number of areas impacting capital delivery together with

the prudent re-structuring of the total program over an increased time period should facilitate its successful completion as planned. Actual delivery of the current year's (2014/15) capital program which is similar in size and resource mix to the annual program being proposed, adds weight to SA Power Networks' position that it has the capacity and capability to deliver the program of IT capital works over the next five year period.

Table 3: Capital program deliverability summary of analysis

AER Comment	Key observations
<p><i>SA Power Networks' proposal to substantially increase its use of outsourced resources to deliver 63 per cent of the IT Capex program presents delivery risks given SA Power Networks has not previously applied this level of outsourced service delivery in the IT area</i></p>	<ul style="list-style-type: none"> • A substantially increased volume of capital works has been delivered during 2014/15 using a similar mix of internal and external resources to that proposed for the next regulatory period. • The overall proportion of external staff, taking account of Capex and Opex resourcing, is similar to the average for the current regulatory period. • Results of recent post-implementation reviews and reporting from the ITPMO have indicated a strong level of success in delivering the increased Capex program in the past year.
<p><i>The risks to the successful delivery of this program in the timeframe proposed, in terms of resourcing, implementation, business process changes and the realisation of benefits, appear high</i></p>	<ul style="list-style-type: none"> • A maturing corporate level change management team is in place to provide direct advice and assistance in managing the changes brought on by the IT capital program. • Improved governance processes over the last year in relation to the overall management of the program through increasing maturity of the ITPMO and vendor management processes would be expected to aid management of the delivery risks.
<p><i>SA Power Networks' IT service management capability is, at present, relatively immature</i></p>	<ul style="list-style-type: none"> • The active co-ordination of these programs by the CPMO should ensure continued alignment to corporate drivers and identification of broader corporate level risks. • Whilst not directly associated with capital delivery, SA Power Networks' ITSM capability has increased significantly through the IT Transformation project with live dashboard reporting and formal Business Relationship Manager roles.

IT Capex Portfolio

In responding to the AER's concerns as to the sheer scale of the proposed capital program, SA Power Networks went through a series of steps to reduce the program planned for the 2015-2020 RCP. This included:

- A prudent business lead process of validating the risks and priorities of each business case that lead to selection of the three "Extreme" risk programs together with additional "High" risk or high priority programs of work.
- The time frames for the whole program were extended to allow for its completion over a ten year, rather than five year, period.
- Identification of pre-requisite sub-projects within other programs not selected for the next RCP to ensure that the high priority program was deliverable without the need to undertake any lower priority work until necessary.
- Identifying the impact on recurrent Capex initiatives which had originally assumed certain work would be completed within the non-recurring portfolio.

- A re-assessment of the required scope of work and efficient costs of delivery where further information or understanding had been gained since the initial proposal. This particularly related to the Tariff and Metering business case for which IT Capex was reduced from \$27m down to \$11.1m as a result of the AEMC's final decision on Distribution Network Pricing Arrangements and its preliminary decision on the Expanding Competition in Metering and Related Services Rule change.

Table 4: Capital program scope and timing summary of analysis

AER Comment	Key observations
<i>The proposed program is a large scale, complex and interdependent program of works which impacts broadly across core IT systems and business processes</i>	<ul style="list-style-type: none"> • The total program of work has been reduced to an annual scale comparable to the 2014/15 forecast delivery of IT capital projects • The proposed program has been reduced through a prudent, business lead process of prioritisation and re-assessment of efficient costs
<i>The program is to be delivered in a relatively short timeframe for such a complex portfolio of works</i>	<ul style="list-style-type: none"> • The overall program has been spread over two regulatory periods thereby doubling the time period over which the Capex program is to be delivered. • Increased maturity in change management across the business has reduced the risk of unsuccessful delivery due to a lack of acceptance by the business.
<i>In our view, a prudent operator would undertake such a portfolio of work over a longer timeframe to reduce delivery and resourcing risk</i>	<ul style="list-style-type: none"> • Key dependencies have been identified to ensure that only those projects absolutely required for the highest priority outcomes are undertaken.

IT Opex Step Changes

In its original proposal, SA Power Networks included 22 separate IT related Opex step changes totalling \$43.9m for the period. The AER disallowed them all giving a number of reasons including:

- Some of the related Capex was aimed at achieving efficiencies so Opex should not go up
- Costs were related to existing or unclearly identified compliance obligations
- Costs associated with replacement of systems shouldn't require an increase
- The Rate of Change approach already compensates for the increased costs, and
- The case made for the increased funding was not clearly articulated.

In its revised proposal, SA Power Networks has sought to retain only the step changes related to the highest risk rated business cases that are included in the revised proposal and to specifically align them to the AER rules for assessing Opex step changes.

- **CIS OV Replacement** – regulatory change

Significant components of this upgrade are required in order for SA Power Networks to meet the requirements of the AEMC rule change – ERC0171 - Customer access to information about their energy consumption.

Because the existing CISOV and related systems are at the end of its technical life and will cease to be supported by the vendor, a new system with a different licensing and support model is required.

- **Data Centre Consolidation** – Capex/Opex substitution

The current data centre facilities represent a high risk to the business through inadequate disaster recovery and business continuity capability, and are significantly behind the standard expected in the industry. It does not have the physical or processing capacity to cope with the expected material increases in data resulting from the various Power of Choice related rules currently being implemented.

- **SAP Foundations** – regulatory change

An upgrade to SAP’s foundational database technology is required in order to support the various initiatives to comply with RIN reporting and Power of Choice related regulations. The current database technology is at the end of its technical life and represents an extreme risk to the business in light of expected increases in data requirements to support new RIN reporting requirements and the impact of the Power of Choice rule changes.

- **Enterprise Information Security** – external environment change

The increase in the risk of external cyber-attacks [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]

5: Opex step changes summary of analysis

Criteria	Key observations
<p>Compliance with change in regulatory obligations or requirements;</p> <p>In justifying additional expenditure for a new regulatory obligation, must show:</p> <ul style="list-style-type: none"> • Binding (uncontrollable) change in regulatory obligations that affects efficient forecast expenditure; • Timing of regulatory change and timing of efficient expenditure to comply with the changed obligation; • Options considered and the selection of an efficient option to meet the change in regulatory obligations; • Timing of step change and the efficient costs of the step change to meet the changed legal obligations; • The costs cannot be met from existing regulatory allowance or from other elements of the 	<p>CIS OV Replacement</p> <ul style="list-style-type: none"> • There is a clear need for SA Power Networks to plan an appropriate response to meeting the mandated parts of Power of Choice industry reforms. One of the justifications of the CIS OV Replacement has been aligned to new obligations under these reforms – specifically, to meet the new obligations of a DNSP under NER rule changes for customer access to energy consumption information. • The scheduled AEMC rule changes will take effect within the next regulatory control period, therefore it is prudent management practice for SA Power Networks to include the planned expenditure to meet the required obligations. • The Opex increases have been attributed to the difference in licensing and support costs for the equivalent base technology for the old and new systems. <p>SAP Foundations</p> <ul style="list-style-type: none"> • SA Power Networks has articulated the need to replace its aged, near end of technical life SAP database technology. • The replacement proposal is in line with industry approach and good industry practice. • While not directly aligned to changes in regulatory obligations, the planned upgrade expenditure is a critical enabler for SA Power Networks to deliver the required capability in complying with changed regulatory obligations for RIN reporting and imminent rule changes as a result of Power of Choice industry reforms.

Criteria	Key observations
<p>expenditure forecasts.</p> <p>Additionally, SA Power Networks is expected to justify the cost of all step changes with clear economic analysis, including quantitative estimates of expected expenditure associated with viable options.</p> <p>Impact on expenditure from forecast capital program, such as substitution of Capex with Opex (and vice versa).</p> <p>Additionally, SA Power Networks is expected to justify the cost of all step changes with clear economic analysis, including quantitative estimates of expected expenditure associated with viable options.</p>	<p>Enterprise Information Security</p> <ul style="list-style-type: none"> SA Power Networks has clearly articulated [REDACTED] The risks associated with information security and faced by SA Power Networks are comprehensively described and supported by specific incidents [REDACTED] It has proposed an Opex expenditure forecast [REDACTED]. The timing, scope and expenditure forecasts for the proposed program of work and the prudent and efficient expenditure forecasts and the justification of this step change are evidenced in the detailed 'bottom up' costing templates used for this (and all other) business case(s). The original step change proposed has been reduced in the revised submission due to negotiation of upfront licence fees and changes to staff requirements. <p>Data Centre Consolidation</p> <ul style="list-style-type: none"> SA Power Networks has articulated the need for data centre consolidation through its comprehensive risk analysis that supports the basic need to update its data centre facilities. It has presented the selection of options based on risk and an economic analysis. The need cannot be met with incremental Opex through the rate of change approach to the base IT Opex. The proposed Opex step change represents a trade-off of the Capex involved in other options for the Opex step change of the most efficient, selected option.

EAM and RIN Reporting business cases

In SAPN's revised approach to RIN compliance it has sought to balance its obligations to meet the new mandatory 'Better Regulation' RINs, but also incur any non-recurrent IT capital expenditure required to deliver 'actual' data in a prudent and efficient manner. SAPN performed detailed and thorough analysis of the 1611 fields CA and EB RINs to identify key dependencies and ensured that in the revised schedule only those projects or sub-projects delivering actual RIN data capabilities are prioritised and undertaken in the next regulatory period. This analysis identified that the two major projects, EAM (i.e. includes enhanced RIN data capture capability from delivering Field Force Mobility, Enterprise Information Management, BI Enablement and Intelligent Design Management Systems) and Financial Management (i.e. includes the increased RIN data from HR Systems project) could deliver approximately **92%** of data fields required for compliance of the Better Regulation RIN obligations and new data requirements by the 2017/18 regulatory period (and ongoing).

Furthermore, the objective of SA Power Networks' investment in systems and data capabilities is not limited to making RIN reporting more efficient as summarised by the AER, but to provide the full scope of required 'actual' data to enable the AER to make comparisons and "set efficient expenditure allowances to maximise social benefit". SA Power Networks shares the AER's vision and recognises the benefits of using increased data analysis, alignment with industry good practice and asset management standards to identify opportunities for savings and value creation.

SAPN has also performed detailed analysis to understand the alternative manual cost and effort associated with populating the Category and Economic Benchmarking RIN data templates with actual data, including asset replacement volumes and expenditure from multiple systems using standard reports. In the event the non-recurrent Capex allowance required to deliver RIN reporting is not approved, there could be a significant incremental Opex impact of \$23.2m over five years to SA Power Networks in order for it to record actual information at the classification level required by the AER. SA Power Networks considers it would potentially be more prudent to invest or redirect the otherwise \$23.2m increased Opex costs associated with performing manual RIN processing activities into projects and initiatives that build and develop sustainable long term RIN data capture and reporting capabilities.

2 Deliverability of the revised IT proposal

2.1 Introduction

In its preliminary decision the AER disallowed a significant portion of SA Power Networks' proposed non-recurring IT Capex because it was *"...not satisfied that SA Power Networks' non-recurrent IT capex program is prudent, or that SA Power Networks is likely to deliver the full program in the 2015–20 regulatory control period as proposed."*¹.

The basis of this assessment was centred upon the perceived risk of attempting to complete such a *"...large scale, complex and interdependent program of works"* within the 5 year regulatory period, allied with the apparent lack of experience and maturity of processes in managing a highly outsourced program of work. In its revised submission SA Power Networks has addressed each of these concerns directly by reducing the overall size of the program in the period (refer section 3) and updating the evidence provided to support its capability to actually manage and deliver the program. The deliverability aspect of the submission has two fundamental parts:

- actual delivery of a similar program of work in the current period, and
- maturity in delivery, management and governance processes.

2.2 Actual delivery

During the current period, SA Power Networks implemented a new IT Operating Model that included a restructuring of the IT function and implementation of a more rigorous approach to program and vendor management. This has enabled the delivery in 2014/15, of a program of capital work totalling approximately \$52.9m. This in itself represents a significant increase on the previous years in the current regulatory period which averaged less than \$25m (real \$2013/14) per annum in total IT Capex. The split of IT costs (i.e. excluding business resources on IT projects) utilised in delivering this program of work in 2014/15 is shown below:

¹ Australian Energy Regulator, Preliminary Decision SA Power Networks determination 2015-16 to 2019-20, Attachment 6 – Capital expenditure, Section B.6.3 p.6-118

Table 6: IT Capital Program Delivery – expenditure breakdown (2014/15)

Cost	2014/15 Forecast (Real \$m June 2015)	2014/15 Forecast % of Total	Average % for 2015-2020
Internal Staff	6,354	12.0%	8.4%
External Staff	1,986	3.8%	16.1%
Services - labour	23,873	45.1%	54.6%#
Services - other	6,996	13.2%	
Materials etc.	8,768	16.6%	12.5%
IT business overheads	4,947	9.3%	8.4%
Total	52,924	100%	100%

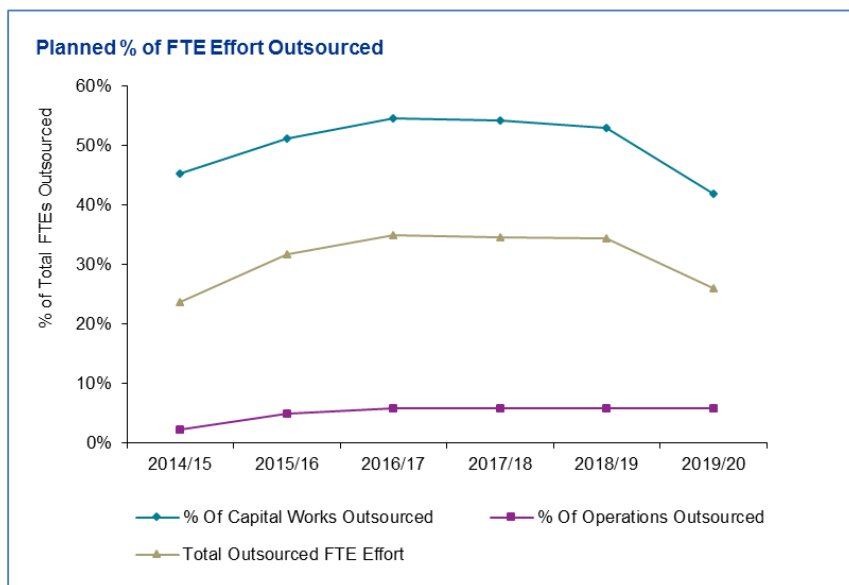
- split between outsourced labour services and other, such as licences, is not available.

The low use of external contractors in 2014/15 at around 6% of the total labour costs is indicative of the result of the IT Transformation project that saw the majority of contract staff released from the organisation. This contrasts to the previous four years where external staff costs (i.e. contractors) exceeded the cost of internal staff but outsourced services were significantly less than the 45.1% of the total IT Capex shown above.

This change in the resourcing mix used in the current year is indicative of the planned mix going forwards as the stated strategy of ensuring a minimum of 35% of Capex is insourced labour and at least 70% of operational FTE resources are likewise insourced, takes effect. This is designed to enable access to an appropriate pool of skills to achieve the objectives of the program of work whilst ensuring in-house skills and business knowledge are leveraged, maintained and developed. This is a prudent strategy for managing skills and resources which allows fluctuations in resource needs to be serviced externally.

The forecast FTE effort and the percentage that comprises of the total resource effort is illustrated below.

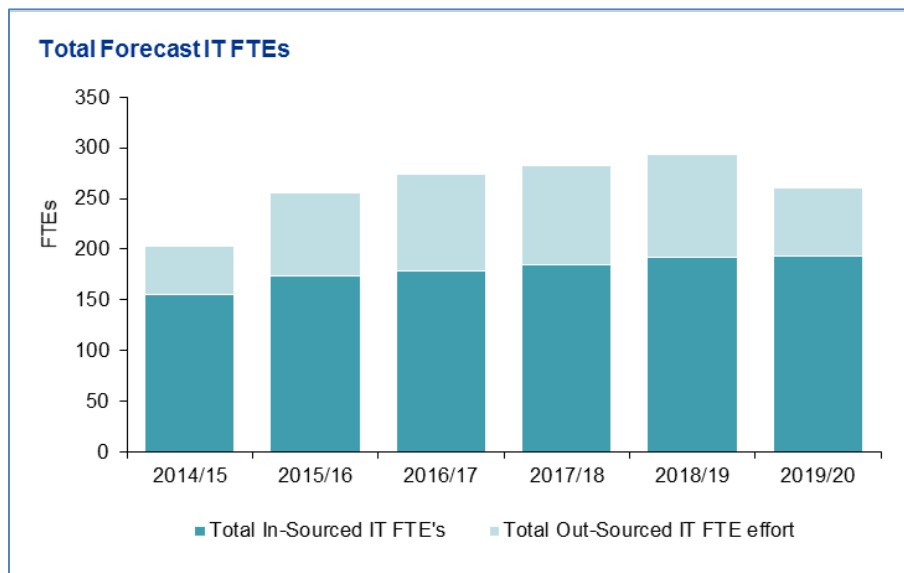
Chart 1: Outsourced percentage of IT Effort – 2014/15 to 2019/20



Note: Outsourced effort provided by CHED Services as part of the outsourcing of SA Power Networks' FRC function is not included in this chart (nor available) being part of an overall business function outsourcing arrangement.

The operating and capital combined outsourced effort for the next regulatory period averages 32% which provides a better indication of the overall requirement for management of external resources than looking at Capex delivery alone.

Chart 2: Outsourced percentage of IT Totex – 2010 to 2020



It is important to also note that in the next regulatory period, for Totex, the split of external resources between outsourced services and contracted staff moves significantly from one biased towards contract staff to one favouring outsourced services. The increased emphasis on outsourced services over contracted staff would be expected to lower the internal management overhead required and lower the delivery risk as such services are contracted on the basis of delivering a specific outcome rather than just staff hours that have to be managed.

Current IT Capex program performance

ITPMO Reporting

The IT Program Management Office (ITPMO) maintains a schedule of regular monitoring and reporting on the progress and performance of the IT projects under its remit. A weekly and monthly reporting regime to the IT leadership team is used to facilitate regular monitoring and escalation of issues arising within projects.

The most recent set of weekly status reports indicates that of 68 active projects, 3 were flagged as being off track (red) and another 3 were 'on watch' (amber). The issues causing the off track projects were highlighted with planned remedial actions. In addition, a monthly CPMO "Portfolio Performance Report" is presented to the executive which describes the overall status of the program of work as well as highlighting specific remedial actions being undertaken.

Post-Implementation Reviews and Project Closure Reports

As part of SA Power Networks' standard IT project methodology, all projects undergo a Post-Implementation Review (PIR) to assess the overall success of the project against its original objectives and to identify lessons learnt to inform ongoing improvement in the delivery process. This is typically performed 6-12 months after completion of the project to allow sufficient time for benefits and issues to develop. On completion of a project, a Project Closure Report (PCR) is produced to summarise the immediate outcomes and delivery of the project and any lesson learnt purely from the conduct of the project.

A sample of PIRs and PCRs that have been recently completed are summarised below:

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Table 7: PIRs and PCRs

Project	Date	Key findings
Post IT Transformation		
Customer Facing Quick Wins (PCR)	Jan 2015	All objectives achieved under budget due to reduced project management costs and minimal issues identified during testing. Identified close user involvement throughout project as key to its success
WebDesktop & Internet Explorer Upgrade (PCR)	Mar 2015	Objectives achieved with minor overrun from original budget and extended timeframe due to technical issues encountered. A number of lessons learnt identified.
Fire Danger Levels (PCR)	Nov 2014	All objectives achieved on budget, inclusive of contingency. Challenges encountered from outside project were met without significant impact on project.
Telxon Replacement (PCR)	May 2015	Original scope was increased significantly but project ended within the revised budget inclusive of contingency. 'Exceptional' user feedback. Met tight timeframes working with key external supplier. Run during IT Transformation which impacted staff/management availability but improved project processes and governance.
Click Upgrade (PCR)	Mar 2014	Objectives achieved under budget without use of contingency. Strong relationship with external vendor. Lessons learnt include strategic observations in relation to assessment of TCO.
Protection Settings Sheet Upgrade (PCR)	Dec 2014	Objectives achieved under budget with only minor delays due mainly to decisions not to engage specific external resources.
Pre IT Transformation		
MS-Exchange Upgrade (PIR)	Dec 2012	Approx. 70% overrun on budget. Resourcing problems caused increases to delivery schedule and cost.
Customer Related Program (PIR)	Apr 2012	Approx. 18% increase on original budget due to expanded scope and resourcing issues resulting in need for additional external staff.

Whilst issues were encountered in the projects subject to the PIRs above, these were conducted before the IT Transformation project which was completed in mid-2014. Since then, these results would indicate that the new operating model and project management/governance processes have been successful in delivering a major program of IT capital expenditure from both a business objectives and budgetary perspective.

2.3 Delivery capability

SA Power Networks has demonstrated its capability to deliver major programs of work through successful delivery of the 2014/15 capital works. In addition, over the past year, it has also increased its maturity in a number of areas that have both contributed to the recent successes and provided a strong base of capability to deliver the proposed program in the future.

IT and Corporate Program Management Offices (ITPMO/CPMO)

The ITPMO function was set up around three years ago with the primary role to help coordinate IT projects. With the implementation of the Corporate PMO (CPMO) about 18 months ago, the two groups have aligned their processes based on an independent gap analysis performed by KPMG on the CPMO. Project documentation and processes have been aligned to the Prince 2 standard with the majority of relevant procedures now documented and enforced.

The CPMO and ITPMO are currently working together on a joint IT Improvement Plan that includes development of consistent KPI reporting and lead indicators to identify issues in projects as early as possible.

Focus of the ITPMO is on projects which are considered purely IT (e.g. SAP foundations, recurring asset replacement) and any business lead project with a major element of IT delivery in it. As part of the on-going process of improvement, ITPMO staff are currently working with CPMO staff to improve the definition of the boundary between the two groups.

IT Vendor Management

A further example of the alignment between corporate and IT specific processes is vendor management. Now a defined function within IT with a dotted reporting line to the corporate procurement team, formal processes for managing vendor relationships and performance have been put in place. Whilst operating under the broader corporate procurement policies, work is continuing to formalise the IT specific processes particularly in relation to category planning and supplier risk management.

The majority of external IT spend is done through the IT Services Panel that was set up in 2013 following a competitive tender process managed by the corporate procurement group. Use of the panel has allowed the organisation to rapidly ramp resources up or down as requirements change. Competitive rates defined in the contracts set a good pricing benchmark with major procurements still being competitively tendered. This can result in further discounting on specific assignments together with the agreed volume discounts.

Enterprise Architecture function

The SA Power Networks Enterprise Architecture (EA) team have the critical responsibility for identifying, planning and managing the interfaces between business processes and IT systems and ensuring corporate wide alignment between them. Key interdependencies between processes, people, departments, systems and technologies are identified so that potential issues can be resolved in the context of the related programs of work.

The corporate EA team have developed an Enterprise Blue Print of the organisation with mapped processes down to 'level 3' which has allowed linkages to the draft KPI framework and corporate strategies to be defined. The key benefits of this function to the delivery of the IT capital program is ensuring that all interdependencies are identified for any proposed change so that more accurate forecasts can be made and the change impact can be better managed. Based on the EA framework developed by the team, they are looking at areas and ways that projects can be delivered more efficiently through a better understanding of the inter-connectedness of each element of the program.

Corporate Change Management

Whilst SA Power Networks has had a change management function for some time, it is only in the past 12 months or so that it has matured from being purely project focussed to taking a more holistic view of change across the organisation. The current, eight person, Organisational Change team, reporting to the GM People and Culture, has two key focusses:

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- Improving the capacity for change leadership within the business through training and mentoring, and
- Providing practical assistance to project teams and the business in managing major change programs.

Two complementary frameworks, based on the Prosci² methodology and best practices, have been developed by the team to facilitate these two roles. The first incorporates a suite of tools to support the business in delivering a change project themselves with advisory support and training from the Organisational Change team. The second is used by the team themselves in managing the change from large, cross-functional programs of work.

The Organisational Change team maintain a heat map of the changes being felt by, or planned for, each department in the business so they can monitor the level of change being felt by staff and detect areas of concern before they become a problem. Remedial actions can then be taken, often just improved communication around the change, so that any potential negative impacts can be pro-actively managed.

The SA Power Networks IT group has a dedicated member of the Organisational Change team who provides on the ground support to project teams and liaises back into the corporate team to manage the often significant impacts on the business of IT changes.

IT Service Management (ITSM)

Whilst not directly related to the delivery of capital programs, maturity in ITSM is important from the perspective of being able to continue to service the business during a period of significant change and development. Business-as-usual doesn't stop so a solid foundation and continuous improvement in ITSM is vital if the business is to continue to leverage the IT investment, both past and future.

The recent restructuring of the IT function at SA Power Networks as part of the new IT operating model has been based around the requirements of ITSM as illustrated by the appointment of three Business Relationship Managers and a dedicated IT Service Delivery Manager. This also links with the creation of the CPMO, ITPMO and dedicated change management functions which all form part of the broader service delivery capability within the organisation.

Significant work has recently been done to improve the collection and reporting of performance statistics within IT which are now being reported on a 'live' dashboard available to senior management and displayed on screens throughout the business. The dashboard includes drill down capability so senior managers can look at the detail behind the headlines which includes, for example, the ability to contact individual project or responsible managers if required. Other improvements have been seen in resource forecasting and the general awareness of the need for more defined service delivery processes, both by the business and IT staff.

2.4 Key observations

The AER raised a number of specific issues related to the deliverability of the proposed IT capital program in SA Power Networks' initial regulatory proposal. In its revised IT submission, SA Power Networks has provided strong evidence to support its position that the proposed capital program can be delivered and the risks managed through its existing, and continually evolving, management and governance processes.

Table 8: Capital program deliverability summary of analysis

AER Comment	Key observations
SA Power Networks' proposal to substantially increase its use of outsourced	<ul style="list-style-type: none"> • <i>A substantially increased volume of capital works has been delivered</i>

² Prosci – recognized as a leading global change management consultancy (<http://www.prosci.com/about-prosci/overview/>)

AER Comment	Key observations
<p>resources to deliver 63 per cent of the IT Capex program presents delivery risks given SA Power Networks has not previously applied this level of outsourced service delivery in the IT area</p>	<p>during 2014/15 using a similar mix of internal and external resources to that proposed for the next regulatory period.</p> <ul style="list-style-type: none"> • The overall proportion of external staff, taking account of Capex and Opex resourcing, is similar to the average for the current regulatory period.
<p>The risks to the successful delivery of this program in the timeframe proposed, in terms of resourcing, implementation, business process changes and the realisation of benefits, appear high</p>	<ul style="list-style-type: none"> • Results of recent post-implementation reviews and reporting from the ITPMO have indicated a strong level of success in delivering the increased Capex program in the past year. • A maturing corporate level change management team is in place to provide direct advice and assistance in managing the changes brought on by the IT capital program. • Improved governance processes over the past year in relation to the overall management of the program through recent and increasing maturity of the ITPMO and vendor management processes would be expected to aid management of the delivery risks.
<p>SA Power Networks' IT service management capability is, at present, relatively immature</p>	<ul style="list-style-type: none"> • The active co-ordination of these programs by the CPMO should ensure continued alignment to corporate drivers and identification of broader corporate level risks. • Whilst not directly associated with capital delivery, SA Power Networks' ITSM capability has increased significantly through the IT Transformation project with live dashboard reporting and formal Business Relationship Manager roles.

3 Revised IT Capex portfolio

3.1 Introduction

In its preliminary decision the AER disallowed a significant portion of SA Power Networks' proposed non-recurring IT Capex stating "...we are not satisfied that SA Power Networks' non-network IT capex forecast reasonably reflects the efficient costs that prudent operator would require to achieve the capex objectives."³.

The basis of this assessment were concerns "...in relation to the economic justification of projects, SA Power Networks' selection of preferred options, the discretionary nature of many projects, and the low level of tangible benefits identified..."⁴.

In its revised submission SA Power Networks has reduced the overall size of the proposed program of work through a reassessment of business requirements and priorities and by stretching the timeframes for delivery to span the next two regulatory periods.

3.2 Program reduction

In responding to the AER's concerns as to the sheer scale of the proposed capital program, SA Power Networks went through a series of steps to prudently reduce the program planned for the 2015-2020 RCP.

Risk assessment and prioritisation

The first step was to identify the individual programs that had been ranked as Extreme risk in their business case risk assessments and to validate those assessments. This was undertaken as part of a broader reassessment of the relative priorities of the portfolio of IT capital projects by the business and facilitated by IT. The results of this analysis confirmed the following four projects as the top four that must be done in the next period:

- Enterprise Information Security (Risk: Extreme)
- SAP Foundations (Risk: Extreme)
- Data Centre Consolidation (Risk: Extreme), and
- CIS OV Replacement / CRM (Risk: High)

In addition to these four programs, a further three business cases were also considered by the business to be "non-discretionary" due to their "High" risk rating and underlying regulatory requirement:

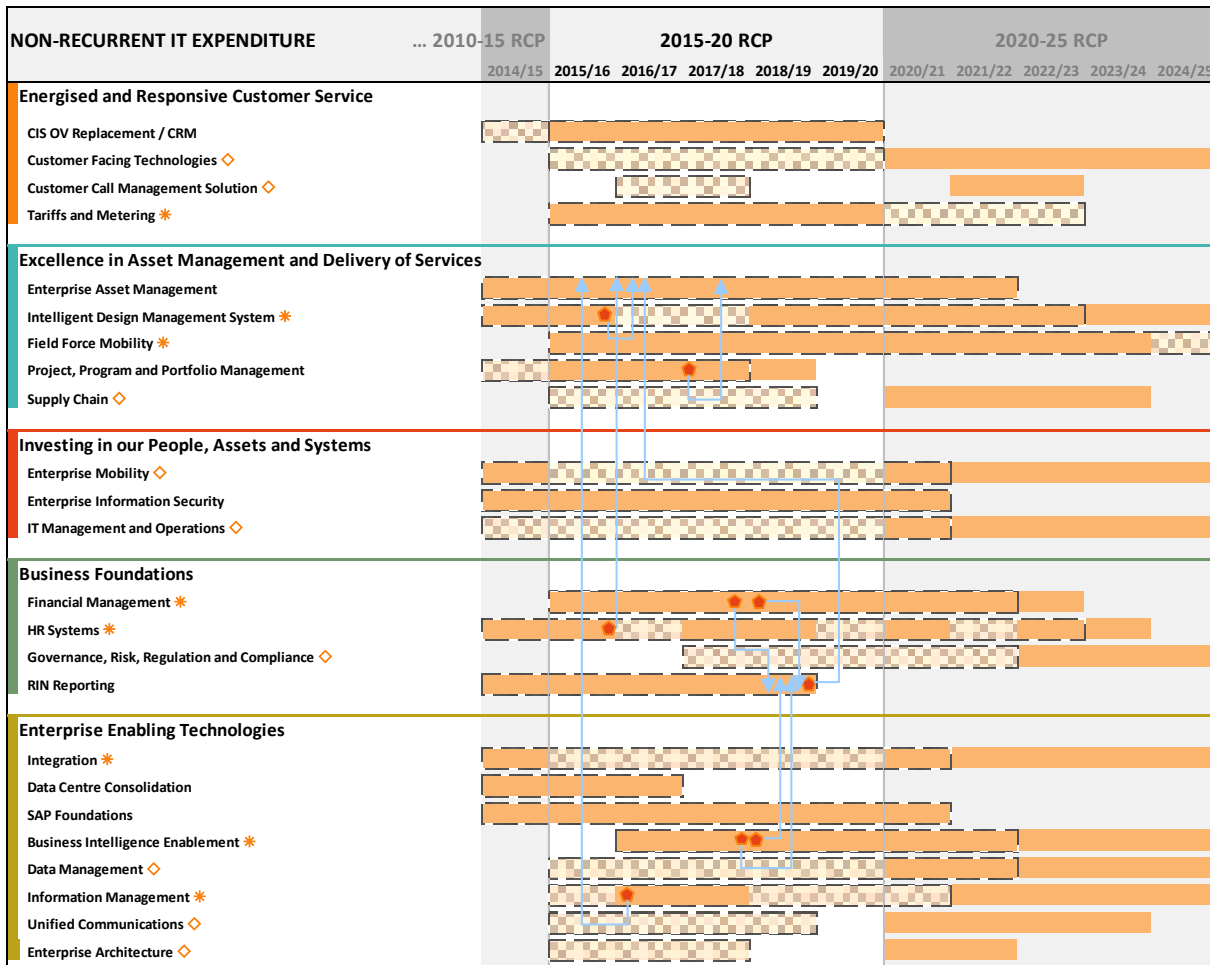
- Tariffs and Metering (Risk: High (previously Extreme – adjusted by the business due to change in understanding of regulatory requirements)
- RIN Reporting (non-discretionary), and
- Enterprise Asset Management (EAM).

A further seven programs/business cases were identified as having pre-requisite projects for these top seven. These included the Field Force Mobility project which in addition to supporting the EAM and RIN Reporting programs, did itself have a positive NPV in the business case.

³ Australian Energy Regulator, Preliminary Decision SA Power Networks determination 2015-16 to 2019-20, Attachment 6 – Capital expenditure, Section B.6.3 p.6-121
⁴ ibid

Lengthening timeframes

Following the changes to the scope and cost of the proposed IT Capital program noted above, SA Power Networks has prudently re-scheduled the final program of work to spread it out across the 2015-20 and 2020-2025 regulatory control periods. This was done to further smooth the effort across the next period as well as to put in place a schedule for the projects that had been taken out of the revised submission for 2015-20 but for which a business case to complete them over a longer term still existed. The diagram below has been provided by SA Power Networks to illustrate this movement of the timing of projects.



Key:

- Revised schedule (June 2015)
- Original schedule (October 2014)

- * - Reduced scope in 2015-20 RCP
- ◇ - Deferred to 2020-25 RCP

- Dependency

Identify pre-requisite projects

Whilst the prioritisation of business cases above was done at the broad program level (each business case or program is made up of a number of smaller projects), the remaining programs still retained individual pre-requisite projects in the business cases that had been removed from the 2015-2020 RBP submission. A detailed analysis of these dependencies was conducted to identify the specific projects in the delayed business cases that were still required by the seven major programs of work that remained in the revised submission.

Individual projects with total costs for the period of approximately \$27.9m were identified within the following business cases as being pre-requisites for the seven prioritised programs:

- Field Force Mobility
- Intelligent Design Management System
- Project, Program and Portfolio Management
- Financial Management
- HR Systems
- Business Intelligence Enablement, and
- Information Management.

Impact on recurring Capex

The original proposal for non-recurrent Capex had a number of assumptions built into it which related to work planned within the recurrent Capex program. For example a non-recurrent project to replace a system would imply a drop in the normal upgrade cycle of the existing system. If the replacement does not go ahead or is delayed, then these costs would need to be added back into the forecast recurrent Capex. The delayed programs of work for which this occurred were identified as:

- Governance, Risk and Compliance systems – Cura system not being replaced so biennial upgrades required
- Customer Facing Systems – ongoing maintenance and enhancement of various customer facing systems that were to be replaced together with a scheduled refresh of the corporate web-site, and
- SAP business planning and modelling – requires remediation of existing tools to align with current business requirements.

The total of these projects is approximately \$4.2m.

Re-assessment of costs

In addition to identifying a reduced number of projects to be included in the revised submission, the individual business cases were re-assessed to ensure that the proposed costs were still the most efficient and that the most prudent option had been chosen. This process resulted in a small reduction in the proposed costs of the Field Force Mobility project (\$8.7m down to \$8.0m) by moving some elements of the project into the next regulatory period, and a significant decrease in the IT costs for Tariffs and Metering (\$27m down to \$11.1m).

Tariff and Metering costs

The justification for the Tariff and Metering business case was heavily tied to the consequences of the Power of Choice initiatives that were anticipated to bring in cost reflective tariffs, contestable metering and utilise smarter meters for customers and network management. Since the original proposal further clarification and understanding of the consequences and timelines of the Power of Choice regulations has been gained. In particular, the AEMC has made the following determinations that directly impact DNSPs:

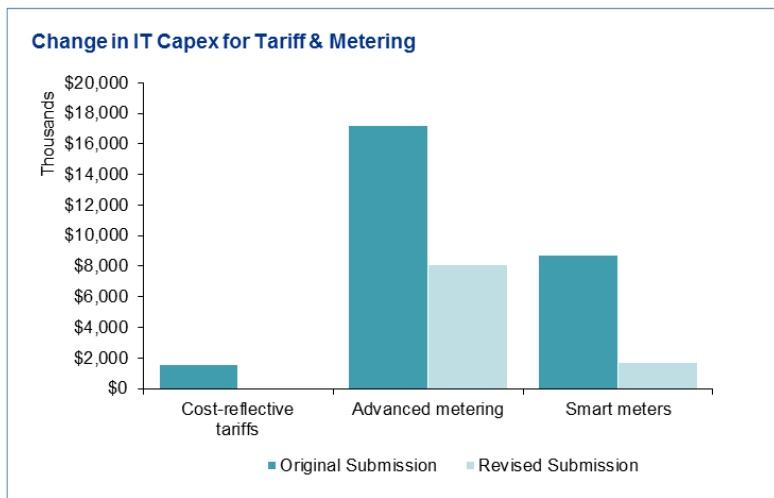
- [FINAL] Distribution Network Pricing Arrangements (ref ERC0161) – requiring DNSPs to set cost reflective prices commencing in 2017, and
- [DRAFT] Expanding Competition in Metering and Related Services (ref ERC0169) – changing the roles and responsibility related to meter reading to commence 1 July 2017.

This has allowed the scope of the business case to be re-assessed and a number of the individual elements either removed altogether or significantly scaled down.

The chart below illustrates the drop in the IT costs for each of the three major elements in the business case:

- Cost-reflective Tariff
- Meter Contestability
- Network Monitoring

Chart 3: Tariff and Metering IT Capex



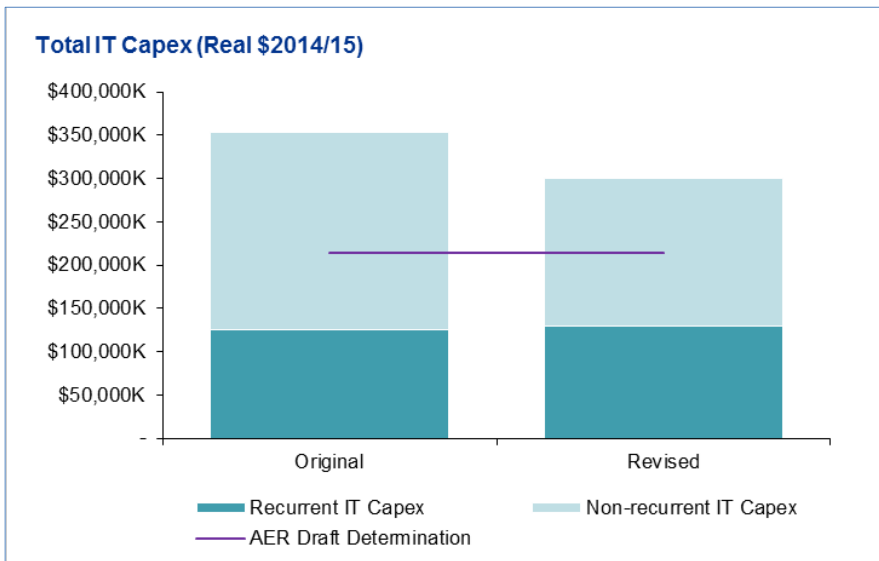
3.3 Revised Capex program.

The result of the re-prioritisation and scheduling of the non-recurrent Capex program referred to above is an overall reduction in the proposed IT Capex program (inclusive of business effort) of 15.3% from \$353.7m to \$299.7m (Real \$2014/15). This represents an increase over the preliminary decision of approx. 40%.

Table 9: Revised IT Capex Proposal

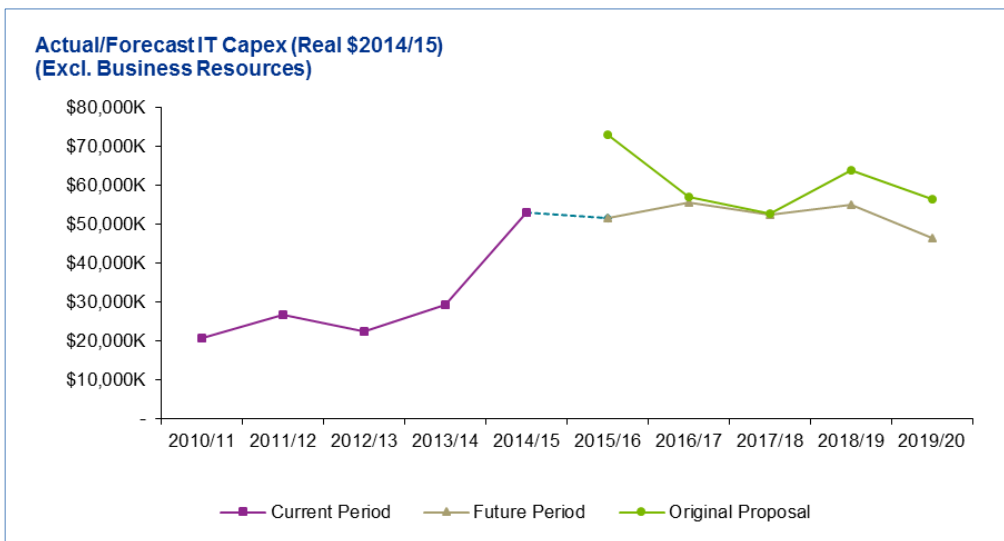
Cost	Original Proposal \$m (Real \$June 2015)	Revised Proposal \$m (Real \$June 2015)	Change
Capex – Recurrent	126.0	130.2	+3.3%
Capex – Non-recurrent (incl. business change)	227.7	169.5	(35.6%)
TOTAL CAPEX	353.7	299.7	(15.3%)

Chart 4: Reduction in total Capex



The flattening of the effort associated with the reduction in overall costs for the period is illustrated below which also demonstrates the significant lowering of the effort planned for the first year of the RCP to the point where it represents a reduction on the current (2014/15) year's IT capital spend:

Chart 5: Annual IT Capex 2010 – 2020



(Excludes business resources for comparability with current period figures.)

3.4 Key observations

In its preliminary decision, the AER considered that the unprecedented scale of the IT Capex program being proposed by SA Power Networks was neither prudent nor achievable. Through a process of prudent re-prioritisation by the business and re-assessment of the efficient costs of delivery, SA Power Networks has proposed a revised program of work that addresses the key concerns raised by the AER.

Table 10: Capital program scope and timing

AER Comment	Key observations
<p>The proposed program is a large scale, complex and interdependent program of works which impacts broadly across core IT systems and business processes</p>	<ul style="list-style-type: none"> • <i>The total program of work has been reduced to an annual scale comparable to the 2014/15 forecast delivery of IT capital projects</i> • <i>The proposed program has been reduced through a prudent, business lead process of prioritisation and re-assessment of efficient costs</i>
<p>The program is to be delivered in a relatively short timeframe for such a complex portfolio of works</p>	<ul style="list-style-type: none"> • <i>The overall program has been spread over two regulatory periods thereby doubling the time period over which the Capex program is to be delivered.</i>
<p>In our view, a prudent operator would undertake such a portfolio of work over a longer timeframe to reduce delivery and resourcing risk</p>	<ul style="list-style-type: none"> • <i>Increased maturity in change management across the business has reduced the risk of delivery</i> • <i>Key dependencies have been identified to ensure that only those projects absolutely required for the highest priority outcomes are undertaken.</i>

4 IT Opex step changes

In its preliminary decision, the AER did not include the 22 proposed step changes, totalling \$43.9 million, in SA Power Networks' alternative Opex forecast relating to IT Opex. Many of these step changes were proposed IT Opex increases associated with non-recurrent IT Capex projects.

In response to the AER preliminary decision, as described in the previous section, SA Power Networks has reduced its IT Capex portfolio to eight non-recurrent initiatives for regulatory compliance, and business risks. The IT Opex step changes are therefore reduced to \$19.4 million (Real \$2014/15) in the revised IT proposal.

This section considers the four proposed IT Opex step changes proposed by SA Power Networks against the AER assessment guidelines:

- CIS OV Replacement
- Data Centre Consolidation
- SAP Foundations, and
- Enterprise Information Security.

4.1 AER assessment guidelines on step changes

In the Expenditure Forecast Assessment Guideline⁵, the AER has outlined its requirements associated with expenditure step changes;

- Step up or step down in expenditure for compliance with change in regulatory obligations or requirements, and
- Impact on expenditure from forecast capital program, such as substitution of Capex with Opex (and vice versa).

In justifying additional operating expenditure for a new regulatory obligation, SA Power Networks is required to show:

- *there is a binding (that is, uncontrollable) change in regulatory obligations that affects their efficient forecast expenditure*
- *when this change event occurs and when it is efficient to incur expenditure to comply with the changed obligation*
- *the options considered to meet the change in regulatory obligations*
- *that they selected an efficient option—that is, the NSP took appropriate steps to minimise its expected cost of compliance from the time there was sufficient certainty that the obligation would become binding*
- *when they can be expected to make the changes to meet the changed legal obligations*
- *the efficient costs associated with making the step change*
- *the costs cannot be met from existing regulatory allowances or from other elements of the expenditure forecasts.*⁶

In addition, in its preliminary decision the AER stated: "*Step changes should generally relate to a new obligation or some change in the service provider's operating environment beyond its control.*"⁷. This apparently expands the considerations in the Guideline to include changes in the operating environment in addition to regulatory changes whilst retaining the factor of 'uncontrollability'.

⁵ AER, Better Regulation, Explanatory Statement, Expenditure Forecast Assessment Guideline

⁶ Ibid, p78

⁷ Attachment 7 – Operating expenditure | SA Power Networks' determination 2015–20, 7-72

Under the Guideline, DNSPs are expected to justify the cost of all step changes with “.. clear economic analysis, including quantitative estimates of expected expenditure associated with viable options.”

4.2 IT Opex step changes – revised proposals

This section specifically reviews the four proposed IT Opex step changes put forward by SA Power Networks against the AER assessment guidelines. The IT Opex step change increases to be included in the preliminary decision proposal and revised proposal stages are summarised in the table below.

Table 11: Proposed IT Opex step changes (\$m, Real \$June 2015)

IT Capex Projects	Proposal \$m (Real \$June 2015)	Revised Proposal \$m (Real \$June 2015)	Difference \$m (Real \$June 2015)
BC01 – CIS OV Replacement	7.6	3.6	-4.0
BC09 – Data Centre Consolidation	4.5	4.5	-
BC17 – SAP Foundations	2.3	2.3	-
BC26 – Enterprise Information Security	10.2	9.0	-1.2
Total	24.6	19.4	-5.6

SA Power Networks has reduced the proposed IT Opex step changes since the initial preliminary decision for the CIS OV Replacement and Enterprise Information Security projects.

CIS OV Replacement Opex Step Change

SA Power Networks has included the CIS OV Replacement project within its revised IT regulatory submission due to the high system vendor risk associated with the existing aged system and the severe financial implications of failure. The analysis and justifications for both the IT capital expenditure and operating expenditure investments have been included within the business case and the Opex step change documentations. SA Power Networks is submitting an IT Opex step increase of \$3.6 million (\$m Real June 2015) associated with the planned \$67.7 million (\$m Real June 2015) IT Capex investment for the CIS OV replacement as part of the revised IT submission. The breakdown of this increase is provided in the table below:

Table 12: CIS OV Replacement – IT Opex step change (\$m, Real \$ Dec 2014)⁸

Cost Category	2015/16	2016/17	2017/18	2018/19	2019/20	Total
Software Maintenance	-	-	0.70	0.73	0.73	2.16
Support	-	-	0.43	0.43	0.43	1.30
Total	-	-	1.13	1.16	1.16	3.46

The key consideration of the expenditure step changes and their justifications are reasonably aligned with the AER assessments as follow:

⁸ Detailed breakdown not available in real \$ June 2015.

Table 13: Key considerations of the CIS OV Replacement Opex step change

AER consideration:

Compliance with change in regulatory obligations or requirements.

SA Power Networks has stated that components of the CIS OV Replacement will enable it to fulfil the DNSP obligations under the NER rule change for "Power of Choice - Customer access to information about their energy consumption."

This rule change will allow customers and their authorised representatives to request electricity consumption data from DNSPs from 1 December 2014.

There are different types of electricity consumption data under the National Electricity Rules:

- Energy data – refers to data recorded directly from a meter without any processing of that data;
- Metering data – refers to energy data that has been collected and processed by a metering data provider; and
- Settlements ready data – refers to metering data that has been collected and validated by AEMO and used for billing purposes.

The minimum requirements for which SA Power Networks will need to be compliant relate to the provision of metering data, such as format, time frame and the number of free requests. The capability to provide these minimum requirements will need to be implemented by 1 March 2016.

SA Power Networks will be required to comply with the planned schedule of rule changes over the next regulatory control period and can be reasonably expected to include the required costs as part of prudent expenditure forecast planning.

Additionally, SA Power Networks will be expected to comply with associated changes in industry rules and the associated processes as a DNSP in line with the National Electricity Market operations as a result of these imminent rule changes. The current CIS CRM solution will not be able to support the new system functionalities required by a number of imminent rule changes as a result of the Power of Choice industry reform. The options and analysis in the solution for meeting the above capability requirements have been included within the business case and form part of the justification for the efficient CIS / CRM Capex and Opex forecasts.

The proposed step change in operating expenditure would appear to align with the NER expenditure objectives relating to binding regulatory obligations and rule changes as a result of the Power of Choice industry reforms.

Additional considerations:

Replacement of aged, end of technical life IT application for CIS and CRM functions;

Opex increase as a result of the new Capex activities;

Justification of step changes with reference to known and identified cost drivers.

SA Power Networks has articulated the key justification for the planned capital expenditure being the replacement of its aged and end of technical life CIS application, where system support is no longer offered by the Vendor. Additionally, functional enhancements to the current application is limited and will limit SA Power Networks capability in delivering the requirements in efficiently meeting the obligation of the scheduled rule changes. This may hinder SA Power Networks ability to deliver the intended Power of Choice customer services.

The same level of base technology system support and maintenance activities supporting the current solution have been included in the planned forecasts for the new solution. SA Power Networks has explained that the key reason for the IT Opex increases are a result of differences in the licencing and support costs, as the current solution was developed and supported in-house with little or no licencing obligations, compared to the vendor supported solutions proposed within the

business case.

SA Power has revised down its proposed IT Opex step change from \$7.57m to \$3.45m. The composition of the IT Opex increase includes \$2.16m for software maintenance and \$1.30m for software support.

Data Centre Consolidation Opex Step Change

The proposed Data Centre consolidation investment consists of an IT Capex investment of \$4.68 million (\$ FY14) and an IT Opex of \$4.88 million (\$ FY14) over the next regulatory control period. SA Power Networks has included the project within its revised IT regulatory submission due to the extreme business risk in the event of failure of the current data centre arrangements. The options analysis and justifications for both the capital expenditure investments and operating expenditures have been included within the business case and the Opex step change documentations.

The key consideration of the expenditure step changes and their justifications are reasonably aligned with the AER assessments as follow:

Table 14: Key considerations of data centre consolidation Opex step change

AER considerations:

Impact on expenditure from forecast capital program, such as substitution of Capex with Opex.

Expected to justify the cost of all step changes with clear economic analysis, including quantitative estimates of expected expenditure associated with viable options.

SA Power Networks has articulated the need for the consolidation and replacement of its data centre function.

- The current data centre facilities in converted office space are reaching full capacity, in both physical space and data processing capability, with upgrades required to cater for the anticipated increase in business data volumes and processing;
- The need cannot be met with incremental IT capital and operating expenditures through the rate of change approach to the base IT Opex;
- Current data centre operations and facilities has inadequate DR and business continuity capabilities, as evidenced in recent incidents. SA Power Networks has evaluated this business risk at high to extreme level in accordance with its corporate risk management policy.

SA Power has provided the results from their economic and risk analysis within the table below, in supporting the selection of the proposed option.

Table 15: IT data centre options comparisons, \$million (Real \$ Dec 2014)⁹

Option	Total Capex	2015 – 2020 RCP IT Opex	NPV ¹⁰	Overall Risk Rating
Do Nothing	-	6.724	-7.659	High to Extreme
Build	19.544	3.711	-21.395	High
Expand	13.891	2.772	-15.913	Medium to High

⁹ SAPN Original Submission – 20.102 CONFID – SAPN IT BC Data Centre Consolidation

¹⁰ NPV over a 7 years period 2014/15-2020/21, discount rate 5.44%

<i>Selected Option: Co-location hosted</i>	4.682	4.883	-8.562	Moderate
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Based on the combined economic and risk analysis, SA Power Network's selected option is reasonable and prudent. With the rejection of the 'Do Nothing' option due to the associated risk to the business, the preferred choice represents the most efficient viable option of those considered being a substitution of a slightly higher Opex for the much higher Capex figures of the other two options. As such the selection aligns to AER step change consideration.

While the selected options total cost in the regulatory period at \$9.56 million (\$ FY14) (i.e. total Capex and Opex) is slightly higher than the avoided cost at \$9.41 million (\$ FY14) over the next regulatory period, the selected option reduces the operational risk associated with the business systems operations, as such, indirectly improves reliability of business system operations and in turn, quality of customer services.

SAP Foundation Opex Step Change

SA Power Networks is proposing an upgrade of its foundational database technology, Oracle, which supports its core SAP ERP system. While the SAP application receives a periodic upgrade every 5 years, the foundational database technology has largely remained untouched since its implementation in 1997, it is close to reaching capacity based on current level of business transactions.

The database technology is effectively reaching the end of technical life and is limiting the functional development of SAP and the scalability required to cater for the anticipated increase in data volume and system complexity from changes in the national electricity market and regulatory obligations, in particular:

- To comply with requirements in RIN reporting based on actual data by 2014/15 and 2015/16
- To comply with obligations as a DNSP in the finalised and pending rule changes as part of the Power of Choice industry reform.

The upgrade of the foundation database is in line with accepted industry practices, the implementation strategy and underlying architecture are supported by SAP and has been adopted by other organisations which have corporate SAP ERP implementations.

The project has been prioritised for inclusion within the IT re-submission as the aged Oracle database and hardware technology is considered at extreme risk level, in accordance with the SA Power Networks corporate risk management policy.

The proposed Capex forecast of this project is estimated at \$8.83m (\$FY14), with an associated Opex of \$2.33m (\$FY14) over the next regulatory period. The Opex forecasts consists of \$1.34m of software and hardware maintenance and \$0.97m in labour, with the following annual breakdown presented in the following table:

Table 16: Breakdown of SAP Foundation Opex step change (\$millions, Real \$ Dec 2014)

Opex category	2015/16	2016/17	2017/18	2018/19	2019/20	Total
Labour	0.194	0.194	0.194	0.194	0.194	0.97
Maintenance	0.121	0.291	0.300	0.313	0.313	1.339
Other services	0.005	0.005	0.005	0.005	0.005	0.025
Total	0.320	0.490	0.499	0.512	0.512	2.334

The key consideration of the expenditure step changes and their justifications are reasonably aligned with the AER assessments as follow:

Table 17: Key consideration of SAP Foundation step changes

<p>AER consideration:</p> <p><i>Compliance with change in regulatory obligations or requirements.</i></p> <ul style="list-style-type: none"> - <i>There is a binding change in regulatory obligation that affect efficient forecast expenditure;</i> - <i>Timing of change and timing of to incur efficient expenditure to comply with the changed obligation;</i> - <i>Selection of an efficient option</i>
<p>SA Power has indicated the upgrade of the SAP foundational database technology will enable its compliance with the following changes in regulatory obligations as a DNSP:</p> <ul style="list-style-type: none"> • AER requirement for RIN reporting to be based on actual asset and financial data • The imminent and pending NER rule changes as a result of the Power of Choice industry reform, including: <ul style="list-style-type: none"> - Distribution network pricing arrangements; - Expanding competition in metering and related services; - Improving demand side participation information provided to AEMO by registered participants; and - Multiple trading relationships. <p>While compliance to these new regulatory obligations is not the primary justification for the SAP Foundations IT Opex increases, it is reasonable for SA Power Networks to include prudent expenditure forecasts which would be required to meet the requirements of imminent regulatory changes.</p>
<p>Additional considerations:</p> <p><i>Replacement of aged, end of technical life IT application for SAP foundation database technology;</i></p> <p><i>Opex increase as a result of the new Capex activities;</i></p> <p><i>Expenditure forecasts in line with good industry practice;</i></p> <p><i>Justification of step changes with reference to known and identified cost drivers.</i></p>
<p>SA Power Networks has sufficiently articulated the need in the replacement of the aged SAP foundation database technology:</p> <ul style="list-style-type: none"> • Near capacity for at the current level of operations; • At end of technical life, with diminishing vendor support; • Reliance on an aged core system increases risk in delivering network business operations and delivery of reliable customer services; • Limiting system capability in developing application enhancements to support business requirements; and • The choice of database upgrade technology is in line with industry approach and good industry practice. <p>SA Power Networks has provided supporting details on the drivers for the proposed IT Opex increases of \$2.33 million (\$ FY14) over the next regulatory period. In summary, the increases in IT Opex will support the planned increases in output in the form of increasing data volumes and increasing complex technical environment:</p>

- Reasonably factored SAP and databases to support upgraded system functionality and expected increases in data volume, complex reporting and business process changes;
- Increases in support costs associated with a more robust technical environment; and
- Small increases in other service costs.

Enterprise Information Security Opex Step Change

SA Power Networks is proposing \$6.28 million (\$ FY14) of IT Capex investments and \$8.67 million (\$ FY14) in IT Opex in its revised IT submission for its Enterprise Information Security Foundation program over the next regulatory control period. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

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[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]					[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]

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<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>

4.3 Key observations

SA Power Networks has revised its planned IT forecasts, additionally in the justifications for increases in IT Opex as a result of the revised IT Capex projects, in accordance to the assessment criteria for expenditure step changes.

Criteria	Key observations
<p>Compliance with change in regulatory obligations or requirements;</p> <p>In justifying additional expenditure for a new regulatory obligation, must show:</p> <ul style="list-style-type: none"> • Binding (uncontrollable) change in regulatory obligations that affects efficient forecast expenditure; • Timing of regulatory change and timing of efficient expenditure to comply with the changed obligation; • Options considered and the selection of an efficient option to meet the change in regulatory obligations; • Timing of step change and the efficient costs of the step change to meet the changed legal obligations; 	<p>CIS OV Replacement</p> <ul style="list-style-type: none"> • There is a clear need for SA Power Networks to plan an appropriate response to meeting the mandated parts of Power of Choice industry reforms. One of the justifications of the CIS OV Replacement has been aligned to new obligations under these reforms – specifically, to meet the new obligations of a DNSP under NER rule changes for customer access to energy consumption information. • The scheduled AEMC rule changes will take effect within the next regulatory control period, therefore it is prudent management practice for SA Power Networks to include the planned expenditure to meet the required obligations. • The Opex increases have been attributed to the difference in licensing and support costs for the equivalent base technology for the old and new systems. <p>SAP Foundations</p> <ul style="list-style-type: none"> • SA Power Networks has articulated the need to replace its aged, near end of technical life SAP database technology. • The replacement proposal is in line with industry approach and good industry practice.

Criteria	Key observations
<ul style="list-style-type: none"> The costs cannot be met from existing regulatory allowance or from other elements of the expenditure forecasts. <p>Additionally, SA Power Networks is expected to justify the cost of all step changes with clear economic analysis, including quantitative estimates of expected expenditure associated with viable options.</p> <p>Impact on expenditure from forecast capital program, such as substitution of Capex with Opex (and vice versa).</p> <p>Additionally, SA Power Networks is expected to justify the cost of all step changes with clear economic analysis, including quantitative estimates of expected expenditure associated with viable options.</p>	<ul style="list-style-type: none"> While not directly aligned to changes in regulatory obligations, the planned upgrade expenditure is a critical enabler for SA Power Networks to deliver the required capability in complying with changed regulatory obligations for RIN reporting and imminent rule changes as a result of Power of Choice industry reforms. <p>Enterprise Information Security</p> <ul style="list-style-type: none"> SA Power Networks has clearly articulated [REDACTED] <p>Data Centre Consolidation</p> <ul style="list-style-type: none"> SA Power Networks has articulated the need for data centre consolidation through its comprehensive risk analysis that supports the basic need to update its data centre facilities. It has presented the selection of options based on risk and an economic analysis. The need cannot be met with incremental Opex through the rate of change approach to the base IT Opex. The proposed Opex step change represents a trade-off of the Capex involved in other options for the Opex step change of the most efficient, selected option.

5 Enterprise Asset Management & RINs Reporting

5.1 Context and background

Summary of new AER RIN reporting requirements

The Australian Energy Regulator (AER) implemented the “Better Regulation program” (program). The program revised and extended the recurring regulatory reporting requirements for Network Service Providers (NSPs), by issuing three additional RINs in addition to the Annual Reporting RIN. These include:

- Economic Benchmarking RIN
- Category Analysis RIN; and
- Reset RIN (new reporting obligations performed every five years)

The volume of data and level of new detail required by the AER has significantly increased for both financial and non-financial data as well as the requirement for actual rather than estimated data. This change in volume, detail and accuracy has been requested with the intention of allowing the AER to benchmark NSPs at a detailed cost, or performance measure, category level.

The information collected is critical to the AER’s determinations of NSP revenues and it is in the interests of the AER, NSPs and customers for this information to be of sufficient quality to meet the AER’s objectives and purposes. Notwithstanding this, like other NSPs, SA Power Networks is also subject to the risk of significant penalties for failure to comply with RIN requirements.

SAPN RIN Reporting Process – Current State

This section summarise SAPN’s current state processes to meet the AER’s new Better Regulation RIN obligations and ‘actual’ data requirements relating to:

- *Category Analysis RIN*
- *Economic Benchmarking RIN, and*
- *Annual RIN.*

SA Power Networks current systems and processes have been developed over many years with a focus on the existing management, statutory accounting and regulatory requirements. Additional new obligations and data requirements, as required by the new Better Regulation RINs are not supported or collected by legacy SA Power Networks systems and processes. In order to meet reporting requirements, SA Power Networks has taken steps to collect some data manually, via spreadsheets and paper records, adding to the reporting overhead and introducing an inherent level of risk with regard to the accuracy and completeness of data.

Economic Benchmarking RIN

SA Power Networks estimated the cost of preparing back-cast data requirements for the Economic benchmarking techniques at more than \$1.5 million (including auditing costs for ten years of back cast data).

Category Analysis RIN

SAPN legacy systems are also not designed or configured to collect the new level of qualitative and quantitative detail required in the Category Analysis RIN. To address the new data requirements in the short term, SA Power Networks has diverted BAU resources from core business activities to manually extract, manipulate and collate available information into the RIN categories and templates. So, whilst SA Power Networks operates asset management systems, they have not been configured with the level of detail demanded in the Category Analysis RIN. To produce actual information at the detail required, systematic changes are required, to add fields and create links between data sets. As a result, process changes would also be required.

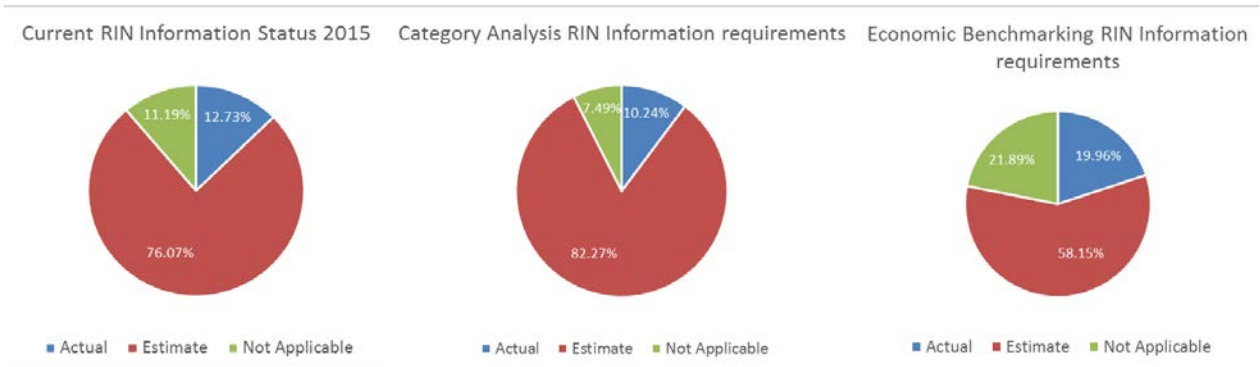
The breadth and complexity of systems and process impacted means that any change in data and/or system requirements is not easily or readily addressed. Subject Matter Experts (SMEs) within SA Power Networks extract what information is available and proceed to re-work and re-calculate the information as necessary to arrive at an estimated figure. Without system, process and data changes, it is not possible to derive actual figures for much of the RIN reports.

This current state summary is supported by a detailed analysis performed by SA Power Networks for each RIN Category, Subcategory and Metric, noting applicable RIN, source of information and whether the data is actual or an estimate. As can be seen from the table and pie charts below, overall 76% of SA Power Networks data is an estimate (of which 58% is estimated in the EB RIN and **82%** of data is estimated for the CA RIN).

Table 21: SAPN Current RIN information status

Current source of SAPN data (%)	CURRENT STATE		
	CA RIN	EB RIN	Overall total
<i>Actual</i>	10.24	19.96	12.73%
<i>Estimate</i>	82.27	58.15	76.07%
Other / Not Applicable	7.49	21.89	11.19%

Chart 6: Current RIN information status



Development of the RIN Business Case

Compliance with the new RIN data requirements presents SA Power Networks with particular challenges under the current structure of their legacy systems and processes. As described above, the majority of information SA Power Networks is able to provide the AER, without significant transformations in system and process capability, is estimated.

For the 2013/14 Regulatory Year, this was deemed acceptable and the AER allowed SA Power Networks to present a level of estimated historical information. However, from the 2015 Regulatory Year for Economic Benchmarking and 2016 Regulatory Year onwards for Category Analysis, SA Power Networks is required to eliminate historical estimated information from their RIN responses both to avoid non-compliance with the RIN requirements and to comply with the AER's stated expectations for the RINs.

Recognising there would be a future compliance issue, SA Power Networks undertook a gap analysis, reviewing the current state as compared to required future state for each RIN Category, Subcategory and Metric, analysing each aspect of the data requirements for availability, completeness, accuracy and granularity to determine the level of change required for systems and processes.

The AER itself had recognised there would likely be system changes required: *"We recognise the incremental burden faced by NSPs in the form of new reporting arrangements in the RINs. In particular, there are likely to be some one-off costs in establishing or modifying reporting systems to enable the preparation and maintenance of the data required in the RINs"*.¹¹

A business case was developed to identify and assess the options available to SA Power Networks to meet the AER's RIN requirements. Three options were considered in detail:

Table 22: RIN Business Case Options Summary

Option	Description	Capex requirement in the Reset period	Opex per annum (incremental of base year)
0	Enhance processes, collect data off system where required and increase the level of internal resources to meet RIN reporting deadlines		Avg \$3.8m per annum
1	Leverage and extend existing solutions, redesign business processes and perform an extensive data capture and cleansing exercise. An interim tactical measure to ensure compliance from set dates is included	\$14.133m	Avg \$2.1m per annum
2	Implement a standalone RIN Reporting solution to be integrated with SA Power Networks systems. Significant system enhancements coupled with a redesign of business processes and an extensive data capture and cleansing exercise. An interim tactical measure to ensure compliance from set dates is included	\$28.3m	Avg \$4.2m per annum

Each of the options listed above considered the dependencies on the other projects necessary to deliver compliant RINs. As a result of the AERs determination that SAPN was not capable of delivering the scale and complexity of the changes proposed, SA Power Networks re-prioritised the projects in its revised IT Capex program and determined that 78% of the RIN Information requirements could be delivered with the implementation of two programs of work, being Enterprise Asset Management and Financial Management project including the delivery of the RIN data requirements from the dependent

¹¹ Australian Energy Regulator, *Better Regulation Explanatory Statement Final RINs for category analysis data* p8

projects. These include Field Force Mobility, Enterprise Information Management, BI Enablement and Intelligent Design Management Systems and HR Systems project.

Alignment to the NER objectives and criteria

The business case highlighted the cost of “Doing Nothing” to SAPN and ultimately, the end consumer. The heavy reliance on manual processes to collect and collate data for the RINs and the risks associated with storing data off systems means this option does not comply with the National Electricity Rules (NER) Expenditure Objectives. The expenditure should reasonably reflect the efficient costs of achieving the objectives; and the costs that a prudent operator would require to achieve the objectives.

The standalone RIN Reporting solution, whilst enabling SAPN to be fully compliant, requires a significant investment in additional systems and resources with no additional benefit above that delivered by the preferred option. Again, this option does not comply with the NER Expenditure Objectives that the expenditure should reasonably reflect the efficient costs of achieving the objectives; and the costs that a prudent operator would require to achieve the objectives.

The preferred option, Option 1 which extends existing functionality and improves the efficiency and effectiveness of collecting and storing the RIN information as well as improving SAPN’s own business purposes meets the NER expenditure objectives.

5.2 AER Preliminary decision

Outlined below is a summary of the AER’s comment and decisions as a result of the AER’s review of Capex and Opex related to the RIN business case.

AER - Preliminary decision SA Power Networks distribution determination - Attachment 6 - Capital expenditure - April 2015

In the AER - Preliminary decision SA Power Networks distribution determination - Attachment 6 - Capital expenditure - April 2015 the AER outlined that “SA Power Networks had used a number of regulatory obligation changes, such as RIN, Power of Choice and contestable metering changes, as justification within the IT investment plan when some of these are yet to be mandated”.

This statement appears to be partially inconsistent regarding the Better Regulations RINs as outlined in the Regulatory Information Notice issued to SA Power Networks dated 7 March 2014 which states compliance is mandated under Section Division 4 of Part 3 of the National Electricity (South Australia) Law and penalties can apply.

AER - Preliminary decision SA Power Networks distribution determination - Attachment 7 - Operating expenditure - April 2015

In the AER - Preliminary decision SA Power Networks distribution determination - Attachment 7 - Operating expenditure - April 2015 the AER stated that “for a number of step changes, SA Power Networks consider the driver to be supporting SA Power Networks’ RIN reporting obligations (Enterprise Asset Management, People and Culture Improvements, Data Management, Enterprise Asset Management, Business Intelligence Enablement). As noted in the specific step change SA Power Networks submitted for RIN compliance, these requirements are not expected to materially change SA Power Networks’ obligations in the 2015–20 regulatory control period. On the basis that these requirements have not changed we do not accept that a step change is needed. If SA Power Networks wish to invest in systems to make RIN reporting more efficient, then this is a matter for it, and not something we provide an increase in funding for.

SAPN has noted the AER’s preliminary decision, however some of their opinions and conclusions appear to be misaligned with statements previously made by the AER. For example the AER statement that “RIN compliance requirements are not

expected to materially change SA Power Networks' obligations in the 2015–20 regulatory control period" appears to be in contradiction with its prior impact assessment of new RIN assessment techniques and data reporting obligations.

In the *AER Expenditure Forecast Assessment Guideline*, the AER acknowledged that "in developing the new assessment techniques, our ongoing consultation with NSPs has improved our understanding of the business and operational changes that will be required to comply with new data requirements. We (i.e. AER) acknowledge NSPs will face expenses as a consequence of adjusting to new reporting standards. This may include training staff, adjusting IT systems, and reorganising data compliance procedures".

Furthermore the AER recognised there would likely system changes required: "We recognise the incremental burden faced by NSPs in the form of new reporting arrangements in the RINs. In particular, there are likely to be some one-off costs in establishing or modifying reporting systems to enable the preparation and maintenance of the data required in the RINs".¹²

In its preliminary determination the AER also stated that 'SA Power Networks [non recurrent IT capex] is more likely to relate to the introduction of new capabilities and technologies into the business, and therefore be more discretionary in nature than recurrent IT capex'.

However it is not clear how non-recurrent IT capex relating to the establishment of new capabilities and technologies required to comply with the AER's new RIN data requirements and new assessment techniques allowances can be deemed discretionary.

Subsequent clarification sought from the AER via meetings and correspondence

SAPN met with the AER on 26 February to discuss their ability to meet the Better Regulation RIN requirements within the AER's prescribed reporting timetable for actual data for 2014/15 Economic RIN (and ongoing) and 2015/16 Category Analysis RIN (and ongoing).

SAPN subsequently wrote to the AER on 24 March 2015 clearly outlining its current issues and concerns regarding compliance with the 2014/15 Economic RIN (and ongoing) and 2015/16 Category Analysis RIN (and ongoing). In particular its current systems and processes inability to currently capture the full scope of the new data requirements, including 'actual' data.

The AER responded to SAPN on 20 May 2015 acknowledging their letter and noting their concerns, however, notwithstanding reaffirmed that SA Power Networks was required to:

- Comply with the Better Regulation RINs;
- Provide 'actual' information in the 2014-15 Economic Benchmarking RIN (and ongoing) and 2015-16 Category Analysis RIN (and ongoing); and
- Provide best estimates and the basis of preparation, including an explanation as to why it is unable to provide actual information for consideration by the AER.

5.3 Subsequent revised approach

As part of SAPN's revised approach to RIN compliance, it has undertaken a thorough and detailed data mapping analysis of the 1611 fields in the two CA and EB RIN spreadsheets. This analysis has assisted them in creating focus and determining which key projects will affect the greatest delivery of actual data compliance and should be prioritised.

¹² Australian Energy Regulator, *Better Regulation Explanatory Statement Final RINs for category analysis data p8*

Based on the analysis performed by SAPN the two key projects including dependant projects that could deliver the greatest increase in actual data include:

- Financial Management;
- Enterprise Asset Management; and
- Other Projects.

The analysis in the table below shows that the two key projects EAM (i.e. includes enhanced RIN data capture capability from delivering Field Force Mobility, Enterprise Information Management, BI Enablement and Intelligent Design Management Systems) and Financial Management (i.e. includes the increased RIN data from HR Systems project) could enable and deliver approximately **92%** compliance of the Better Regulation RIN obligations and new data requirements in the 2017/18 regulatory period (and ongoing).

Table 23: Summary of key projects and their impact on RIN actual data

	RIN CURRENT STATE			PROPOSED RIN FUTURE STATE						Overall total	
	Current source of SAPN data (%)	CA RIN	EB RIN	Overall total	Post-delivery of Project 1: Financial Management			Post-delivery of Project 2: EAM project			
					CA RIN	EB RIN	Total	CA RIN	EB RIN		Total
<i>Actual</i>	10.24	19.96	12.73	29	48	32.90	67	22	45.56	91.19%	
<i>Estimate</i>	82.27	58.15	76.07								
Other / Not Applicable	7.49	21.89	11.19								

Key aspects of SAPN's revised approach to meet the AER information requirements in the 2017/18 regulatory period, include:

- Limiting the scope of non-recurrent IT projects to only the functionality required to deliver 'actual' RIN data;
- Improving the current capability to report actual data to meet new AER RIN reporting obligations and data requirements;
- Reducing the increased ongoing effort and expenditure associated with the manual data collection, estimation and validation process;
- Staged implementation strategy;
- Asset data collection process, and
- Revised overall schedule.

Enterprise Asset Management & RINs Reporting

In the AER's Preliminary Determination of SA Power Network's Capex program, the AER considered that "typically individual projects provided few tangible benefits relative to the forecast costs, and are not economically justified".

SAPN has noted this feedback and has developed analysis to summarise and outline the perceived tangible benefits of each of the capital projects providing enabling capability to deliver 'actual' RIN data.

Table 24: Summary of Benefits, Drivers and Costs for Revised Non Recurrent IT Initiatives (\$m, Real \$ June 2015) enabling RIN data reporting

ID	Business Case	Drivers		CAPEX Costs (2015-2020)			Benefits (2015-2020)			
		Primary NER Objective	Primary Business Driver	IT Costs	Business Costs	Total Costs	Cost Reduction/ Recovery	Cost Avoidance	Total Benefits	Regulatory Submission Benefits Assignment
BC03	Enterprise Asset Mgmt	Comply with Obligations	Compliance & Capability	14.1	16.9	31.0	7.9	10.9	18.8	IT OPEX Offset
BC04	Financial Mgmt	Maintain Reliability	Replacement	3.3	1.8	5.1	-	1.6	1.6	IT OPEX Offset
BC05b	Project, Portfolio Mgmt (PPM)	Comply with Obligations	Compliance & Capability	5.4	0.9	6.3	-	4.0	4.0	IT OPEX Offset
BC10	Intelligent Design Mgmt System	Maintain Reliability	Replacement	1.9	0.2	2.1	1.6	-	1.6	IT OPEX Offset
BC11	HR Systems	Maintain Reliability	Replacement	1.1	0.5	1.5	0.4	-	0.4	IT OPEX Offset
BC16	Field Force Mobility	Comply with Obligations	Compliance & Capability	6.5	1.5	8.0	2.9	6.5	9.4	Business OPEX Offset
BC21	BI Enablement	Comply with Obligations	Compliance & Capability	1.5	-	1.5	-	-	-	-
BC24	Enterprise Information Mgmt	Comply with Obligations	Compliance & Capability	2.5	-	2.5	-	-	-	-
BC32	RIN Reporting	Comply with Obligations	Compliance & Capability	4.0	10.8	14.8	0.0	2.2	2.2	IT OPEX Offset

5.4 Key observations

In SAPN's revised approach to RIN compliance it has sought to balance its obligations to meet the new mandatory 'Better Regulation' RINs, but also incur any non-recurrent IT capital expenditure required to deliver 'actual' data in a prudent and efficient manner.

SAPN has performed detailed analysis and as a result has substantially revised its original schedule. Through identification and re-prioritisation of a number of key programs, namely Financial Management and Enterprise Asset Management to enable it to better meet RIN reporting obligations and 'actual' data compliance sooner.

Revised approach overview

SAPN's revised approach has taken into consideration the AER's feedback and has sought to adjust its original forecast to defer some expenditure to the next regulatory and prioritise the delivery of key functionality (from multiple projects) necessary to enable the collection and reporting of 'actual' data in line with the requirements mandated by the AER. Please see the table below summarising the key changes in IT capital expenditure.

Table 25: Revised Capex of de-scoped projects to deliver RIN only capabilities and data requirements (including business change expenditure)

Business Case	Original IT Capex	Revised IT Capex
Enterprise Asset Management	31.4	31.0
Intelligent Design Management System	9.2	2.1
Field Force Mobility	8.7	8.0
Project Portfolio Management	4.0	6.3
Financial Management	7.9	5.1
HR Systems	2.1	1.5
Business Intelligence Enablement	2.6	1.5
RIN Reporting	14.8	14.8

Incremental Opex for alternative manual process

SAPN performed detailed analysis to understand the alternative manual cost and effort associated with populating the Category and Economic Benchmarking RIN data templates with actual data, including asset replacement volumes and expenditure from multiple systems (GIS and SAP) using standard reports. SAPN demonstrated that in the event the non-recurrent Capex allowance required to deliver RIN reporting is not approved, there could be a significant incremental Opex impact to SA Power Networks to record actual information at the classification level required by the AER.

Modelling of the manual process was undertaken to gain a better understanding of the Opex expenditure required to support the AER RIN requirements should the EAM and RIN Reporting projects be disallowed. The impact is shown in the table below and would cost the organisation approximately \$23.2m over the five year period.

Table 26: Costs associated with manual processes to capture actual data for RINs

	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
Manual Process	2,048,620	2,048,620	2,048,620	2,048,620	2,048,620	10,243,100
Veg Management	1,861,000	0	0	0	0	1,861,000
Material Governors	0	0	837,000	837,000	837,000	2,511,000
Data Governors	0	0	334,000	334,000	334,000	1,002,000
Internal Audit	212,000	212,000	212,000	212,000	212,000	1,060,000
Base Year 13/14	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	6,500,000
TOTAL	5,421,620	3,560,620	4,731,620	4,731,620	4,731,620	23,177,100

Summary of revised step change

Set out in Table 27 is SAPN's revised step change relating to compliance with the new RIN requirements during the 2015-20 regulatory control period.

Table 27: RIN requirements step change 2015-20

June 2015 (\$m)	2015/16	2016/17	2017/18	2018/19	2019/20	Total
RIN Requirements	2.0	0.2	1.4	1.4	1.4	6.4

Summary of key observations

AER Comment	Key observations
<i>SA Power Networks had used a number of regulatory obligation changes, such as RIN, Power of Choice and contestable metering changes, as justification within the IT investment plan when some of these are yet to be mandated".</i>	<ul style="list-style-type: none"> The AER in its letter of response to SA Power Networks dated 20 May 2015 whilst noting its concerns regarding compliance, reaffirmed that SA Power Networks was required to comply with the Better Regulation RINs and provide 'actual' information in the 2014-15 Economic Benchmarking RIN (and ongoing) and 2015-16 Category Analysis RIN (and ongoing).
<i>'SA Power Networks [non recurrent IT capex] is more likely to relate to the introduction of new capabilities and technologies into the business, and therefore be more discretionary in nature than recurrent IT capex'.</i>	<ul style="list-style-type: none"> It is unclear how non-recurrent IT capex directly related to the establishment of new capabilities and technologies required to comply with the AER's new RIN data requirements and new assessment techniques can be deemed discretionary if it has been mandated by the AER.
<i>As noted in the specific step change SA Power Networks submitted for RIN compliance, these requirements are not expected to materially change SA Power</i>	<ul style="list-style-type: none"> As per the AER Expenditure Forecast Assessment Guideline "We (i.e. AER) acknowledge NSPs will face expenses as a consequence of adjusting to new reporting standards. This may include training staff,

AER Comment	Key observations
<p><i>Networks' obligations in the 2015–20 regulatory control period.</i></p> <p><i>On the basis that these requirements have not changed we do not accept that a step change is needed. If SA Power Networks wish to invest in systems to make RIN reporting more efficient, then this is a matter for it, and not something we provide an increase in funding for.</i></p>	<p>adjusting IT systems, and reorganising data compliance procedures”.</p> <ul style="list-style-type: none"> • SAPN performed detailed and through analysis of the 1611 fields CA and EB RINs to identify key dependencies and ensured that in the revised schedule only those projects or sub-projects delivering actual RIN data capabilities are prioritised and undertaken for in the next regulatory period. This analysis identified that the two key projects EAM (i.e. includes enhanced RIN data capture capability from delivering Field Force Mobility, Enterprise Information Management, BI Enablement and Intelligent Design Management Systems) and Financial Management (i.e. includes the increased RIN data from HR Systems project) could deliver approximately 92% of data fields for compliance of the Better Regulation RIN obligations and new data requirements in the 2017/18 regulatory period (and ongoing). • The objective of SA Power Networks’ investment in systems is not to make RIN reporting more efficient, but to provide the full scope of required ‘actual’ data to enable the AER to make comparisons and the “setting efficient expenditure allowances to maximise social benefit” • There is a significant incremental operating expenditure impact to SA Power Networks to record actual information to the classification level required by the AER. Analysis performed by SA Power Networks identified that \$23m is required in incremental operating expenditure over 5 years to achieve ‘actual’ data through alternative manual processes. • SA Power Networks considers it would be more prudent to invest or redirect the otherwise increased costs associated with performing manual RIN processing activities to projects and initiatives that build and develop sustainable RIN data capture and reporting capabilities. • SAPN’s shares the AER’s vision of using increased data analysis, alignment with industry good practice and asset management standards to identify opportunities for savings and value creation.

6 Appendix A – Information Sources

6.1 Staff interviewed

- Janette Bettcher, IT Reset Manager
- Anna Lebedev, IT Regulatory Project Manager
- Peter Chapman, IT Strategy Program Manager
- Justin Needham, IT Reset Project Consultant
- Dana Rankine, Project Manager Regulatory Project
- Dan Butcher, Manager, IT Program Management Office
- Emma Cole, IT Supplier Relationship Manager
- Dr. Bryn Williams, Smart Grid Strategy Manager
- Michelle Peterson, Manager, Organisational Change
- Lesley Marchioro, IT Change Management Consultant
- Jonathon Leske, Manager IT Service Delivery
- Brett Miller, Manager, Information Security
- Tara Rosenzweig, IT Chief architect
- Sylvia Caricasole, Manager, Enterprise Architecture
- Richard Amato, Manager, CPMO
- John Woodward, CPMO Manager

6.2 Documents reviewed

Document Title
2. Monthly Performance Report - Apr 15 - Redacted.pdf
2014-15 Delivery Actuals-Forecast Final.xlsx
20150514 Tariffs and Metering discussion.pdf
2015-2020 Revised Regulatory Proposal_Step Changes Section (June 15) (RIN).docx
AER Response 20 May 2015 Compliance with Economic and Category analysis RIN.pdf
Capex and Opex breakdown_20150603.xlsx
CFQW Project Closure Report v1.1.docx
CISOV Replacement Opex Step Change Claim 0.4docx.pdf
Click Upgrade End Project Report v1 0.pdf
Corporate%20Portfolio%20Approval%20Process%20L4%20Procedure.pdf

Document Title
CPMO - ITPMO Improvement Plan.docx
CPMO and IT PMO Improvement Project Stream Update.pdf
Customer Related Program (CRP) - PIR (Signed Version).pdf
Data Centre Opex Step Change Claim v2.5.pdf
Field Force Mobility Business Case Cost Adjustments 1.0.docx
Fire Danger Levels End Project Report v1.0.docx
Infrastructure Maintenance Investment Group Brief.docx
IS-000115 WebDesktop IE Upgrade End Project Report.pdf
IS-000220_End Project Report_v0-4a.pdf
IT Portfolio - comparison v.2.docx
IT Reset Revised Forecast 20150529 1
IT Resourcing and Deliverability 1.12.docx
IT resubmission approach v.1.0
IT Revised Reset Forecast Draft Portfolio View
IT_Reset_Revised_Forecast_20150609.xlsx
IT_Revised_Reset_Forecast_DRAFT_PORTFOLIO VIEW.pdf
ITPMO Lessons Learned Register.xlsx
ITPMO Report - FULL - Week ending 2015 04 30_KPMG.pdf
Labour Forecast for forecast outsourcing.xlsx
Microsoft Exchange Upgrade - PIR (Signed Version).pdf
Non-Recurrent Capex Determination Impacts on Recurrent Capex.xlsx
Portfolio view comparison.xlsx
PSS6 Upgrade End Project Report v1 0.pdf
Resourcing and Deliverability 1.1
Resubmission Sourcing Comparison.xlsx
Revised proposal - competition in metering rule change - Appendix A.xlsx
Revised proposal - competition in metering rule change 1.0-draft.docx
Revised proposal - distribution network pricing rule change - Appendix A.xlsx

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Revised proposal - LV monitoring - Appendix A.xlsx
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