IT Investment Plan 2025-30

2025-30 Regulatory Proposal

Supporting document [5.12.1]

January 2024

SA Power Networks

Empowering South Australia

Contents

Glossary

Acronym / term	Definition
A & W	Assets and Work Program
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AESCSF	Australian Energy Sector Cyber Security Framework
AMTP	Asset Management Transformation Program (Assets and Work Phase 3)
ATO	Australian Tax Office
Capex	Capital expenditure
CER	Customer energy resources
CNS	Customer Notification Systems
CRM	Customer Relationship Management System
DER	Distributed energy resources
DNSP	Distribution Network Service Provider
EDP	Enterprise data platform
ESB	Energy Security Board
ERP	Enterprise Resource Planning
EV	Electric Vehicle
FSE	Click Field Service Edge
GIS	Geographical information system
ICT	Information and Communication Technology
IFRIC	International Financial Reporting Interpretations Committee
IT	Information Technology
LV	Low voltage
MDI	Meter Data Insights
MFA	Multifactor Authentication
NEM	National Electricity Market
NER	National Electricity Rules
NPV	Net present value
ODP	Operational data platform
Opex	Operating expenditure
PIR	Post Implementation Review
RCP	Regulatory control period
RIN	Regulatory Information Notice
SAAS	Software as a Service
SACOSS	South Australian Council of Social Services
SAPN	SA Power Networks
SCADA	Supervisory control and data acquisition
SCS	Standard Control Services
STP	Single Touch Payroll
Totex	Totex Expenditure (capex + new opex)

1. About this document

1.1 Purpose

This IT Investment Plan provides the overview, rationale and portfolio summary of the proposed IT expenditure for the 2025–30 regulatory control period (**RCP**)[1] and enables SA Power Networks' 2025-30 Regulatory Proposal.

SA Power Networks uses IT services to enable and support the efficient operation of its distribution network consistent with the National Electricity Rules (**NER**) expenditure objectives[2], namely:

1. to meet and manage the expected demand for standard control services (**SCS**) over the 2025-30 RCP;
2. to comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;
3. to maintain the quality, reliability and security of supply of standard control services (where there are no applicable regulatory obligation or requirement); and
4. to maintain the safety of the distribution system through the supply of standard control services.

The scope and approach outlined in this document aligns strongly with the Australian Energy Regulator (**AER**) approach to evaluating IT expenditure proposals as detailed in the *AER Non-Network ICT Capex Assessment Approach, November 2019*[3].

1.2 AER Expenditure categories

- Non-network ICT Capex: Recurrent
- Non-network ICT Capex: Non-recurrent
- Non-network ICT Opex: Step-Changes
- Non-network ICT Opex: Base year adjustments

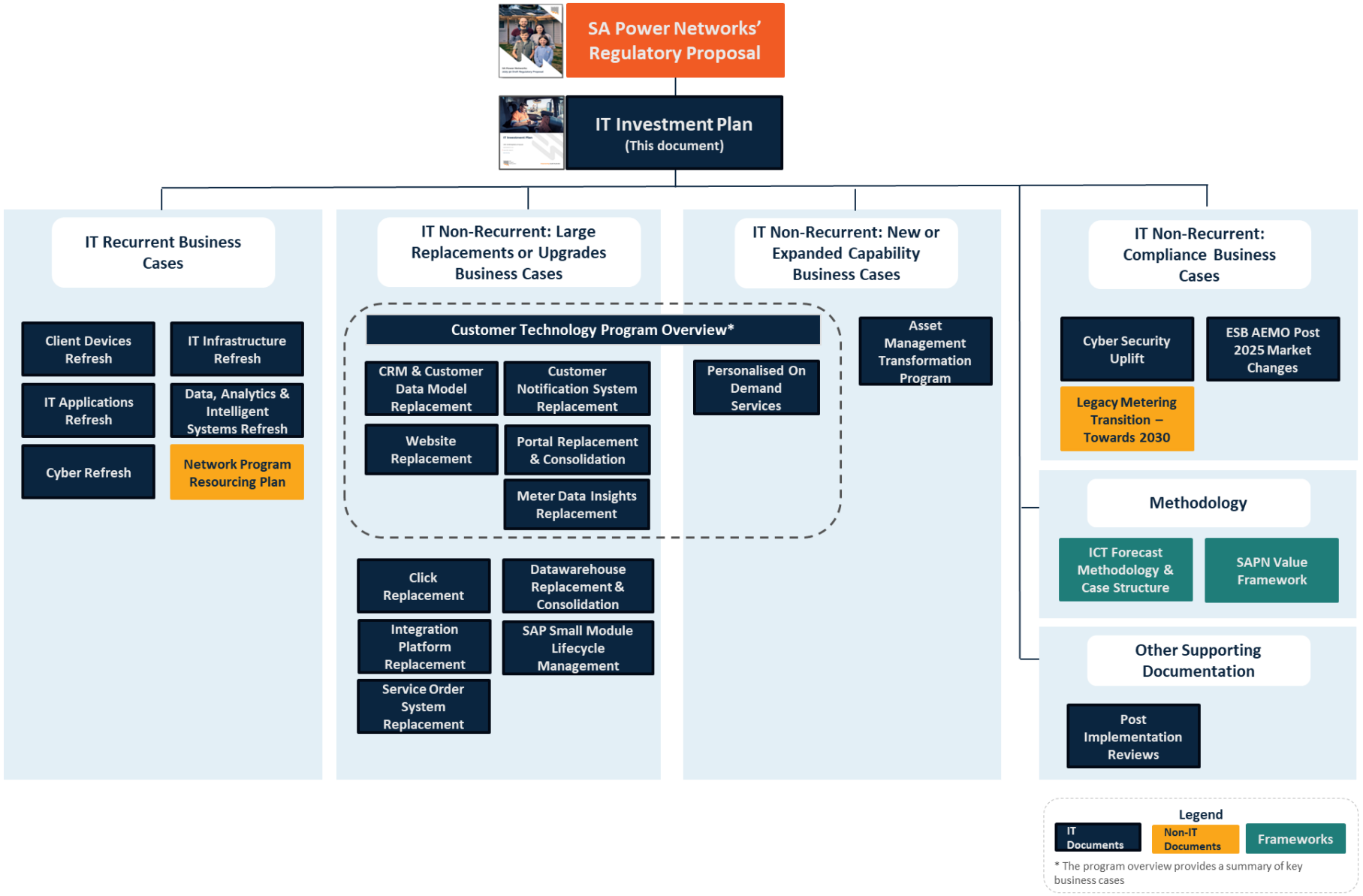
[1] *The Regulatory Control Period from 1 July 2025 until 30 June 2030.*
[2] *The capex objectives set out in clause 6.5.7(a) of the NER and the opex objectives set out in clause 6.5.6(a) of the NER.*
[3] *Australian Energy Regulator: Non-network ICT capex assessment approach, Dec 2019*

1.3 Related documents

Table 1: Related documents

Title	Author	Version / date
5.12.4 - IT Applications Refresh - Business Case	SAPN	Jan 2024
5.12.5 - Client Device Refresh - Business Case	SAPN	Jan 2024
5.12.6 - Cyber Security Refresh - Business Case	SAPN	Jan 2024
5.12.7 - IT Infrastructure Refresh - Business Case	SAPN	Jan 2024
5.12.8 - Data, Analytics & Intelligent Systems Refresh - Business Case	SAPN	Jan 2024
5.12.9 - Cyber Security Uplift - Business Case	SAPN	Jan 2024
5.12.10 - Click Replacement - Business Case	SAPN	Jan 2024
5.12.11 - Enterprise Data Warehouse Replacement & Consolidation - Business Case	SAPN	Jan 2024
5.12.12 - Integration Platform Replacement - Business Case	SAPN	Jan 2024
5.12.13 - Service Order Module Replacement - Business case	SAPN	Jan 2024
5.12.14 - SAP Small Module Lifecycle Management & Optimisation - Business Case	SAPN	Jan 2024
5.12.15 - Assets & Work Phase 3 (Asset Management Transformation Program) - Business Case	SAPN	Jan 2024
5.12.17 - Customer Program: Website Replacement Business Case	SAPN	Jan 2024
5.12.18 - Customer Program: Customer Portals Consolidation - Business case	SAPN	Jan 2024
5.12.19 - Customer Program: Customer Notification System Replacement Business Case	SAPN	Jan 2024
5.12.20 - Customer Program: Meter Data Insights System Replacement Business Case	SAPN	Jan 2024
5.12.21 - Customer Program: CRM Replacement & Data Consolidation Business Case	SAPN	Jan 2024
5.12.22 - Customer Program: Personalised on Demand Services - Business case	SAPN	Jan 2024
5.12.23 - ICT Forecast Methodology & Business Case Structure	SAPN	Jan 2024
5.12.24 - External Review of ICT Cyber Expenditure Treatment	BDO	Jan 2024
5.12.27 - Program Overview - ICT Non Recurrent Customer Technology Program	SAPN	Jan 2024
5.12.29 - ESB AEMO Post 2025 Roadmap Changes Business Case	SAPN	Jan 2024
5.1.5 - SA Power Networks Value Framework	SAPN	Jan 2024
5.2.5 - Resourcing Plan for Delivering the Network Program	SAPN	Jan 2024
19.4 - Legacy Metering Transition - Towards 2030	SAPN	Jan 2024
Digital and Data Strategy	SAPN	Jan 2024
IT Asset Management Plan	SAPN	Jan 2024
2020-25 ICT Post Implementation Reviews	SAPN	Jan 2024

1.4 Document Map



2. Executive summary

- ✓ IT is a primary means of maintaining a reliable and safe network while cost effectively managing the rapid changes of the energy transformation.
- ✓ Our planned IT investment will deliver $525m+ in long term customer benefits.
- ✓ Our IT investment is increasing, compared to the current RCP, but the quantum is entirely consistent with our long-term investment profile and expenditure in previous cycles.

Information Technology (**IT**) is fundamental to enabling the effective and efficient delivery of low-cost electricity distribution services to our customers. In the rapidly evolving energy transformation, in which South Australia is a recognised leader, reliance on IT has increased significantly as IT (and data) has become the primary means to adapt to and manage the evolving energy services. In the 2025-30 RCP this trend will continue as customers are increasingly at the heart of the energy cycle and we continue to leverage IT capabilities to facilitate customers being part of their own energy transition. We will also continue to invest in our IT systems and data to efficiently deliver increased network asset delivery programs, while maintaining a safe reliable network through increased cyber security capabilities, in line with the increases in cyber risk across the Australian grid.

SA Power Networks is successfully delivering cost efficient, reliable, safe and secure services to our customers with one of the lowest IT unit operating costs of any of the Australian distribution network service providers (**DNSPs**)[4]. In the 2020-25 RCP we successfully completed significant and complex programs of work within the planned budgets and timeframes (e.g. billing system replacement, SAP ERP upgrade), and we have demonstrated a long history of delivering IT programs effectively.

This Investment Plan outlines the proposed approach to enabling and supporting our organisation and customers through a period of seismic change in the energy sector. **We will enable the delivery of reliable, secure and adaptive customer energy services through efficient IT services.**

Our IT investment objectives[5],which are consistent with the NER expenditure objectives, are to:

- **Maintain current levels of service and manage IT technology risk** through efficient, secure technology management services, and IT asset refresh and replacement cycles that maximise the useful life of our IT assets and optimise the outcomes for our customers.
- **Maintain compliance with existing and meet new regulatory obligations,** as they emerge in a dynamic and digitally inter-connected energy market environment.
- **Enable the customer energy transition through effective and innovative network management capabilities and great customer experiences.**
- **Manage business and distribution network costs through the efficient use of data and digital technology.** We will continue to build on the ongoing improvement programs to keep our unit costs down and ensure our increased network asset programs are delivered as efficiently as possible.

2.1 Proposed IT expenditure

To enable the delivery of the outcomes defined in the SA Power Networks Proposal for the 2025–30 RCP, we require an IT investment total expenditure (capital and new opex) of $416.0 million (Table 2). This consists of $259.9 million in capital and $156.1 million of opex base-year adjustments and step changes. In

[4] Based on IT benchmarking using publicly available yearly Regulatory Information Notice (RIN) reported data.
[5] Also called the IT Investment Plan objectives within this document.

addition to maintaining our existing services and achieving compliance, this investment is expected to enable $528.6 million in benefits over 10 years.

Table 2: Summary of capex, operating expenditure (opex) impacts and benefits forecast by AER ICT expenditure category/sub category ($million, June $2022)[6]

		2020-25 Allowance	2020-25 Forecast	2025 – 30 Proposed Investment				
AER ICT Expenditure Categories	**AER ICT Subcategories**			Capex	New Opex	**Total Cost**	Compared to 2020-25 Forecast	**Benefits** (10 Year)
Recurrent	Maintain existing services	150.8	154.7	142.9	52.2	**195.1**	26.1%	**36.8**
Non-Recurrent	Maintain existing services – Large upgrades & replacements	73.9	101.5	81.0	40.1	**121.1**	19.4%	**154.7**
	Meet new or altered compliance requirements.	18.4	20.8	4.6	46.3	**50.9**	145.3%	**225.7**
	Enable new or expanded capability	42.9	38.9	31.4	17.4	**48.9**	25.7%	**111.4**
	Total	**286.0**	**315.8**	**259.9**	**156.1**	**416.0**	**31.7%**	**528.6**

The expenditure proposal is 31.7% or $100.2 million larger than the current RCP actuals/forecast but is only 7.5% more when compared to the average of the five years from 2017 to 2022 (see Figure 1). This pattern of increasing investment reflects a number of coincidental drivers:

- the commencement of the next IT 'investment cycle' including the investment to refresh an expanded portfolio of IT capabilities that have been enabled over the last decade;
- the ongoing expansion of the role of data and digital in the delivery of customer energy services during this transformational period; and
- a significant uplift in our cyber security risk and concomitant requirements to manage it. The message from our customer consultations was very clear, that cyber security is extremely important to customers, and they expect us to 'stay ahead of the curve' on cyber risk, particularly given their everyday lives are becoming more dependent on the grid.

The key changes (compared to the current RCP) by AER expenditure category are:

- Our **IT recurrent expenditure** returning to the long-term trend following a planned reduction in the current period during and following the successful completion of the very large and complex refresh programs (billing system replacement & ERP upgrade). Plus increases driven by the additional staff required for the expansion in the network assets programs.
- Larger **replacement and upgrade investments** driven by medium sized systems reaching their 'end of useful life' in the 2025-30 period. These fall into two categories:
  - The ongoing system lifecycle changes where there is announced (or imminent) end to vendor support arrangements, requiring us to take action to ensure we maintain secure and reliable services.

[6] *Unless otherwise specified all dollars are in June 2022, excluding real cost escalation.*

– Systems that are legacy and no longer 'fit for purpose', being unable to cost effectively adapt to the requirements of the energy transformation.

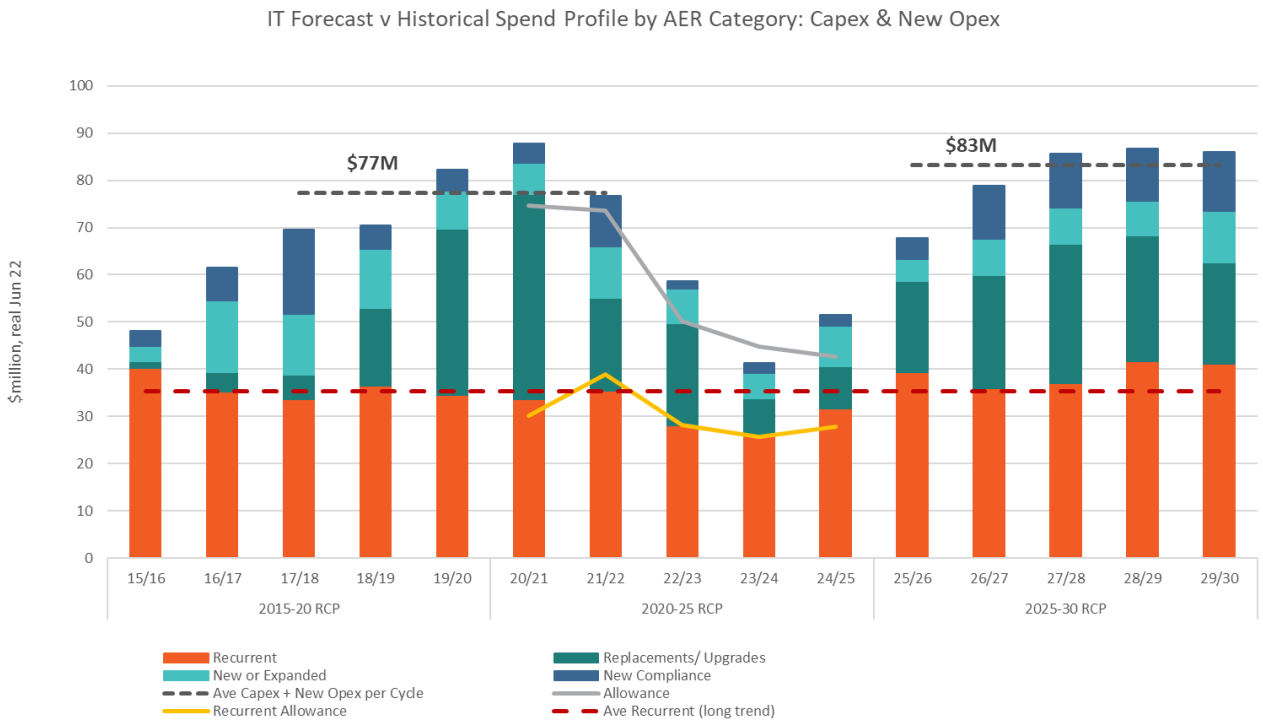


Figure 1: IT capex and new opex actuals and forecasts by RCP. ($million, June $2022)

- A significant increase in expenditure to continue to **manage our increasing cyber risk** plus smaller compliance changes associated with the rapidly evolving national market.
- An increase in demand for new or expanded capabilities to:
  - Continue to respond to and facilitate the energy transformation and to facilitate customer involvement in that transition.
  - Continue our business improvement program to maintain downward pressure on our business and network unit costs and ensure we continue to deliver the most efficient service possible.

The significant proportion of opex in the proposal reflects the continued transition to Cloud services, and in particular the accounting rule changes which have clarified that costs related to 'Software as a Service' (**SAAS**) systems, which are an increasing proportion of our IT landscape, need to be treated as opex.

2.2 Customer Consultation & Input

All of our ICT totex has been communicated to relevant stakeholder groups for information. Our customers more specifically deliberated on, and provided recommendations on, expenditure for initiatives to 'meeting new or altered compliance requirements' and 'enabling new or expanded capabilities' and the initiatives included in our forecast accord with customer expectations as reflected in the recommendations of our People's Panel and feedback on the Draft Plan.

2.3 Benefits from the IT investment

The majority of our IT expenditure is targeted at maintaining our existing levels of service and risk through the efficient delivery of timely refreshes of our existing IT hardware and software, hence is not targeted at

delivering new value or benefits. However, we have identified significant monetised benefits related to a number of our key initiatives. The total monetised benefits are $528.6 million over 10 years, composed of the categories shown in Table 3. Our customers will benefit from reliable cost-effective services during a period of significant change, lower prices through efficient delivery of distribution services, and from the provision of timely information to enable them to make informed decisions about energy services.

Table 3: Summary of 10-year benefits by category ($million, Jun $2022)

Category	Description	Benefits (10 year) $m
Customer Time Saved	Customer time saved from improved customer services.	10.7
Cost Avoidance	Avoiding future customer cost increases by using technology to manage the increasing numbers of customer interactions, as well as delivering our IT programs in a timely and efficient manner.	138.9
Risk Monetisation	Avoidance of costs associated with reversion to manual processes, cyber security incidents, life support customer breaches and regulatory fines.	272.9
Cost Savings	Reduction in licensing and maintenance costs associated with existing systems (used to offset increasing costs elsewhere in the portfolio so these are not passed to the customers).	16.0
	Reductions in our costs to deliver our asset programs of work through using technology to ensure our unit costs are as efficient as possible (we have reduced our electricity network assets funding request by $39.5 million in the 2025-30 RCP).	90.0
	Total Benefits	**528.6**

2.4 Comparison to other DNSPs

We aim to benchmark around the National Electricity Market (**NEM**) average IT recurrent totex per customer for the majority of the time. We believe this the right balance – delivering efficient IT services while continuing to respond and adapt to the rapidly evolving energy market. Our proposed IT investment continues to fulfil this objective.

3. Benefits to our customers

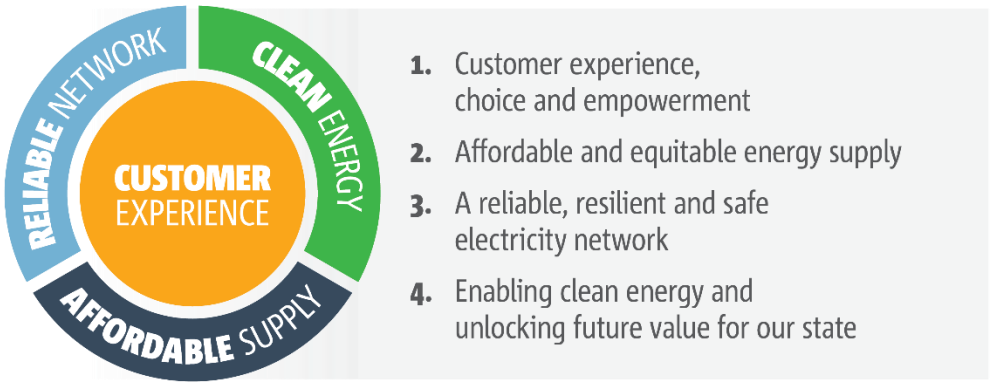


Figure 2: SA Power Networks 2025-30 Customer Key Themes.

Customer Experience, Choice and Empowerment

- Delivering customer time savings and improved customer experience through upgraded IT systems and data.
- Getting accurate customer information to the hands of the right people when they need to use it to help customers.
- Providing customers with more timely and relevant information to help them make decisions.

Affordable and Equitable Energy Supply

- Keeping customers' bills down in the long term through $528.6 million of benefits including:
  - Minimising the cost increases of the more customers interactions as we go through the energy transformation.
  - Continuing to reduce our unit costs for managing and maintaining the poles and wires, while we are increasing our work on the network.
  - Reducing the costs and risk of a cyber incident impacting on electricity supply and/or customer data.

A Reliable, Resilient, Safe Electricity Network

- Ensure strong cyber capabilities and processes are in place to keep your energy supply and your data safe.
- Using technology to enable better decision making and cost effectively manage our assets.
- Keeping our community safe through the provision of accurate and timely information.

Enabling Clean Energy and Unlocking Future Value for our State

- Using our technology to continue to innovate new customer services such as flexible exports.
- Facilitating the easy connection of customer energy resources to our grid.

4. AER Expenditure Evaluation, IT Forecasts and Related Items

4.1 Alignment with AER ICT Expenditure Categories

IT supports our delivery of Standard Control Services to customers in accordance with the NER objectives. Our forecast IT expenditure for 2025-30 is driven by distinct identified needs and is grouped according to these needs, following the approach set out in the AER 'non-network ICT capex assessment guidance note'[7] and detailed in our 'ICT Forecasting Methodology and Business Case Structure'[8], as follows:

- 'Recurrent' expenditure – regular / frequent expenditures to 'maintain existing services', forecast from a top-down (considering revealed costs) and bottom up using a BAU base case counterfactual; and
- 'Non recurrent' expenditure – less frequent or new spend, forecast bottom-up, and sub-grouped into:
  - 'Maintaining existing services' – using a BAU base case counterfactual, assessed versus options that aim to maximise net benefits, but which do not need to result in a positive benefit versus cost;
  - 'Meeting new or altered compliance requirements' – using a 'do-nothing' or 'maintain existing service' base case counterfactual to highlight and monetise the risks that would result, assessed against investment options that aim to show the least cost means of achieving compliance; and
  - 'Enabling new or expanded capability' – using a 'do-nothing' base case counterfactual, assessed versus investment options to show which has the most positive quantified benefits versus costs.

While the AER Evaluation Framework is fundamentally concerned with capital expenditure, we also consider opex (both non-recurrent and new recurrent) as part of the business cases in order to understand and justify the full costs and benefits of the proposed expenditure. This is particularly the case given the increasing proportion of IT expenditure now classified as opex due to the nature of information technology shifting to Cloud capabilities and specifically to SAAS. Our approach allows us to apply the same AER categories and the same rigor to the business cases, irrespective of the expenditure type.

4.2 IT Forecast Costs and Estimates

As documented in detail in our 'ICT Forecasting Methodology and Business Case Structure', SA Power Networks has a mature, systematic and robust approach to building up our IT cost estimates, to ensure reasonableness, prudence and efficiency (see Figure 3 below). The key factors include:

- A multistage iterative process from the identified need to the final business case, involving checking and challenges at multiple levels.
- A bottom-up forecast methodology using a standard effort and cost estimation template and defined competitive standard labour rates for each option in each business case.
- For costs that we are not already incurring we use external third-party experts, indicative quotes and/or comparisons with other entities to derive cost and effort estimates.
- Top-down reviews for each business case to determine dependencies and delivery efficiencies, and usually for non-recurrent business cases, validate overall costs using external experts and/or other external entities with similar experience.
- Qualitative risk analysis for all options and, where viable, monetised risk analysis.
- Quantification of benefits to customers including avoidance and cost reductions.
- Selection of the option with the highest Net Present Value (**NPV**) with each business case.

[7] *Australian Energy Regulator: Non-network ICT capex assessment approach, Dec 2019.*
[8] *5.12.23 - ICT Forecast Methodology & Business Case Structure.*

- Creation of a portfolio of prioritised activity which minimises the costs of delivery, spreads the delivery risk across the RCP, manages our constraints and meets any deadlines required.
- Incorporating feedback from customer and stakeholder groups into the business cases and the portfolio.

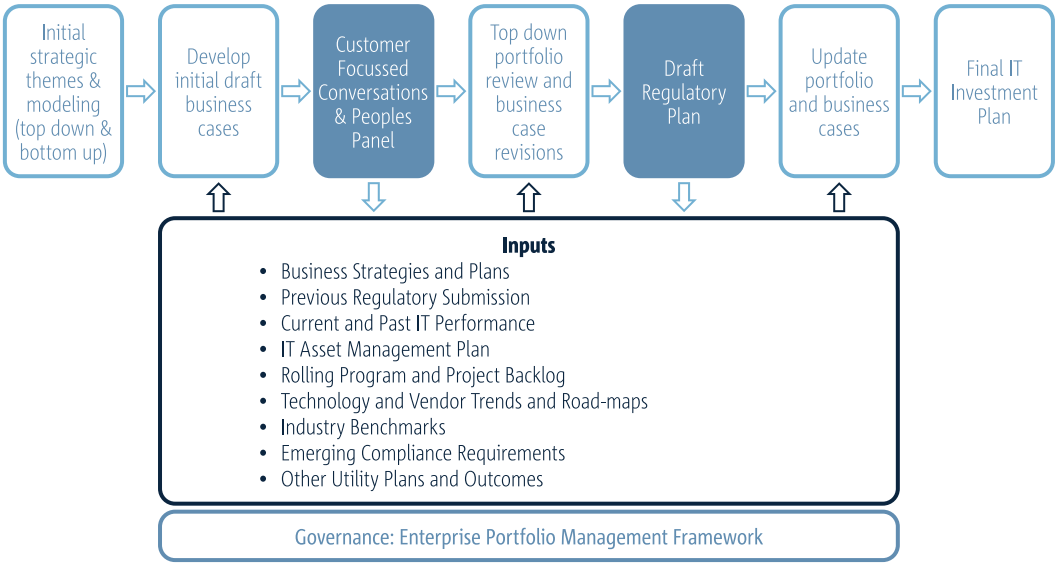


Figure 3: IT forecast development process.

4.3 IT Asset Management Decisions

One of the key inputs to our investment planning process is our IT Asset Management Plan[9] which provides a framework for how we manage our IT Assets to deliver the most value for our customers and stakeholders through balancing risk and cost. The framework aligns with the SA Power Networks Asset Management Policy and outlines our approach to managing IT Assets based on their criticality as it relates to operating the network and delivering distribution services.

In making our investment decisions we take a risk-based approach including consideration of:

- Optimising the value throughout the whole asset lifecycle.
- Basing our risk analysis on the criticality of the system to maintain our existing services.
- Ensuring our assets and data are secure through access to regular patching and refreshes based on the criticality of the system and the level of cyber risk exposure.
- Extending the life of the asset and maintaining our existing investment value through prudent refreshes, upgrades and replacements.
- Extending vendor support arrangements where possible and viable, from both an economic and risk perspective.

As IT assets have significantly shorter lifecycles compared to electricity assets, there is usually a need for investment in refreshing the critical components of our IT assets at least once each RCP. Our larger replacement and upgrade cycles are also much shorter (5 to 15 years).

[9] *IT Asset Management Plan*

4.4 International Accounting Rules and Handling Opex

In April 2021 the International Financial Reporting Interpretations Committee (**IFRIC**) handed down a decision which clarified the accounting treatment of SAAS IT solutions[10]. While in the past the implementation and refresh costs of SAAS were generally capitalised, the IFRIC decision concluded that given the customer does not control the software these costs must be treated as opex.
In line with the AER approach, we will reflect this change in accounting treatment as a base year adjustment in the 2025-30 RCP. Also consistent with the AER approach we have reported SAAS related non-recurrent opex as capex in the current RCP.

4.5 Expenditure Categories and Scope

This investment plan does not include operational technical capabilities associated with the development and running of operational network associated with:

- Facilitating and managing the export of customer energy via Customer Energy Resources (**CER**) (formerly Distributed Energy Resources (**DER**)); nor
- Managing the grid operational technologies and operational telecommunications networks such as SCADA and the Advanced Distribution Management System.

While IT technologies secure and enable these technologies, we have made sure that costs are not duplicated between the CER, IT and OT technologies and initiatives.

IT services provided to SA Power Networks' unregulated affiliated entity (Enerven) are also not included in the IT Investment Plan.

4.6 Nomenclature

The terms 'IT', 'ICT' and 'Digital' can often be used interchangeably. In this IT Investment Plan 'IT' refers to the technology services provided to the organisation, particularly through the IT Department. 'Digital' is used to refer to the full range of technologies that are available to enable the provision of those services, particularly involving the use of data. 'ICT' is used when referring to the AER framework and requirements.

[10] *https://www.ifrs.org/news-and-events/updates/ifric/2021/ifric-update-march-2021/#10.*

5. IT strategic drivers and focus 2025-30

5.1 Strategic and Structure Approach

The electricity industry is undergoing profound change, which is expected to continue for some time. SA Power Networks has developed and refined a mature, strategic and structured approach to navigating this change. Figure 4 outlines the SA Power Networks strategic framework and the IT Investment Plan's role in enabling our strategies (focus areas on this diagram) via our 'Technology and digital capabilities'.

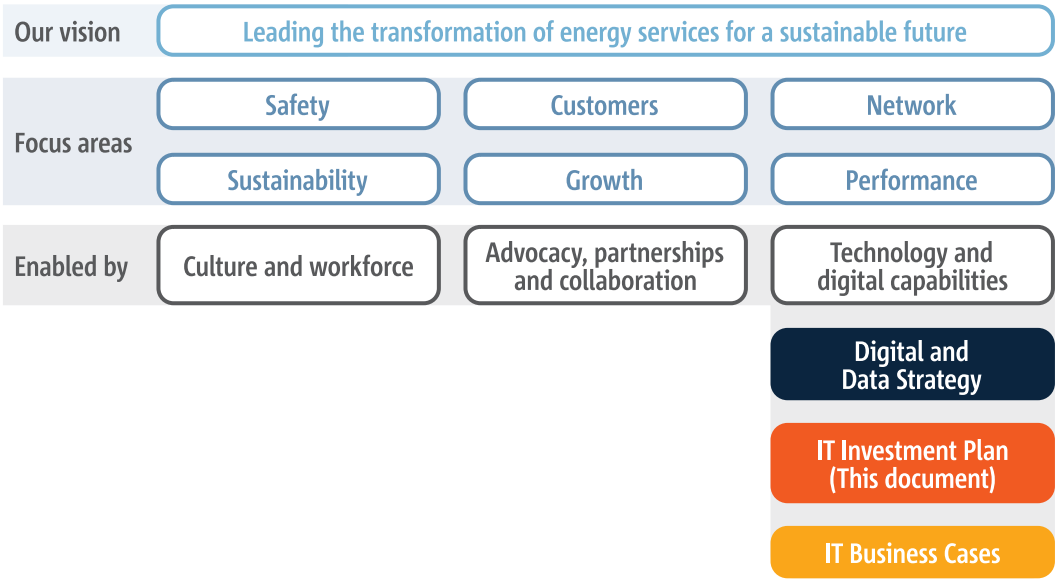


Figure 4: How the IT Investment Plan enables the SA Power Networks Strategic Vision

This IT Investment Plan summarises the IT portfolio of work (IT business cases) required during the 2025–30 RCP to deliver on those strategic directions, which in turn are aligned to the NER expenditure objectives.

5.2 Strategic drivers

Our rapidly evolving business and technology environments present both challenges and opportunities. These are described in detail in our strategic documents and other parts of the proposal. The following is a brief summary of the key strategic drivers impacting on IT – classified as challenges and opportunities.

Challenges

The transformational energy market changes

- Customers are increasingly central to the energy services we provide and their expectations, as well as their requirements for information, will continue to evolve.
- The number of customer interactions is increasing due to the changing energy services being created and enabled eg. roof-top solar, electric vehicles, flexible tariffs.
- The increasing centrality of the grid in customer lives is increasing customer focus on cyber security risk - a theme which was reiterated during our customer workshops.
- The move to a distributed customer energy world requires new and more data intensive approaches to managing our distribution network.
- While the vision is becoming clearer regarding the transition to net zero, the scale of the impacts is far from understood, meaning we can expect many unanticipated changes.

Our ageing and changing network

- Our ageing distribution network infrastructure requires new asset management approaches and tools to contain costs while managing risk.
- The type of work we are doing on the network is changing to include a much larger number of small repairs to keep the network functioning – necessitating changes in how we schedule and deliver work.
- At the same time, the energy transformation is increasing the number of activities to increase network capacity, which also must be cost effectively delivered.
- Data is playing a much larger role in driving evidence and risk-based decisions for our assets.

Core IT needs to continue to evolve cost-efficiently

- IT is playing a much larger role in delivering energy services and in the energy transformation, and this role will continue to increase.
- Cloud services are significantly shifting our opex/capex balance, requiring new approaches to managing our regulatory submissions and our finances.
- Cloud services are reducing our control and choice over when we upgrade and update, resulting in a more continuous change schedule.

Cost-effective opportunities

- Intelligent digital technologies will continue to evolve and offer new opportunities, but also need effective management.
- Intelligent tools can collect and analyse larger volumes of data to help identify and manage risk and make better decisions.
- Good user experience and design across multiple applications is becoming more central to deliver efficient data collection and management of services.

5.3 Digital and Data Strategy

In response to the industry changes and our organisational strategic directions, SA Power Networks developed the 'Digital & Data Strategy' to provide direction for efficient and appropriate investment in digital technologies, and the data that travels through them. The Strategy delineates the key focus areas which will enable the organisation to achieve its strategic outcomes and is outlined in Figure 5.

The objective of our Digital & Data Strategy is to 'build the next-generation digital utility' to enable SA Power Networks to maximise the value of our data and digital technologies and deliver safe, reliable cost-effective energy services. This means understanding and making use of digital technology opportunities while continuing to maintain our existing levels of service and managing our strategic and operational risks. We will actively seek efficient means of helping our organisation to reduce costs to customers through intelligent use of our data and technology. The key objectives are:

- Ensuring efficient network asset planning and delivery through improved data-driven decision making.
- Using digital capabilities to improve our end-to-end processes and work practices and keep our costs down.
- Providing easy to use people-focused technologies that deliver a good experience for both customers and staff and make everyone's life easier.
- Enabling the platforms and capabilities to manage the grid energy transformation.
- Maximising cost-effective innovation opportunities provided by digital technologies to deliver better service to our customers.

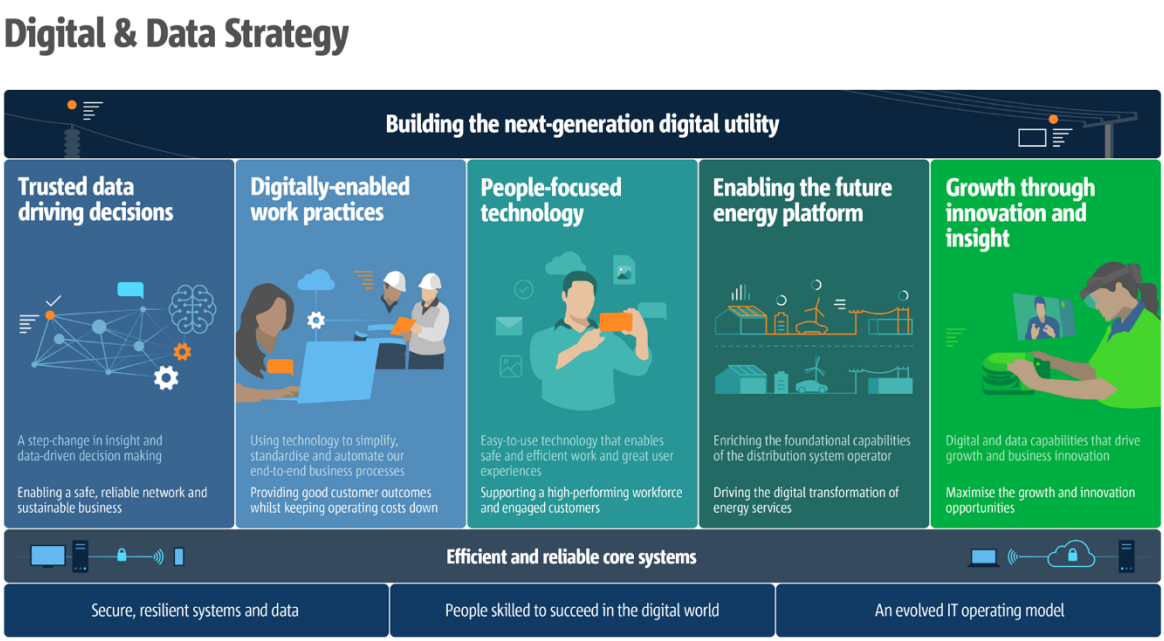


Figure 5: SA Power Networks Digital & Data Strategy

6. Our IT performance in the 2020-25 RCP

- ✓ We continue to benchmark as one of the most efficient IT operating costs in the National Electricity Market
- ✓ We successfully delivered a number of very large complex programs (eg. Billing Replacement Program $80 million, SAP ERP Upgrade $28 million) on time & budget
- ✓ We delivered over $100m in benefits to keep customer costs down

6.1 Benchmarking

As shown in Figure 6 below, SA Power Network's benchmarks as one of the lowest IT operating costs in the NEM, when measured by IT recurrent opex per customer. It's a position we have held for well over a decade.

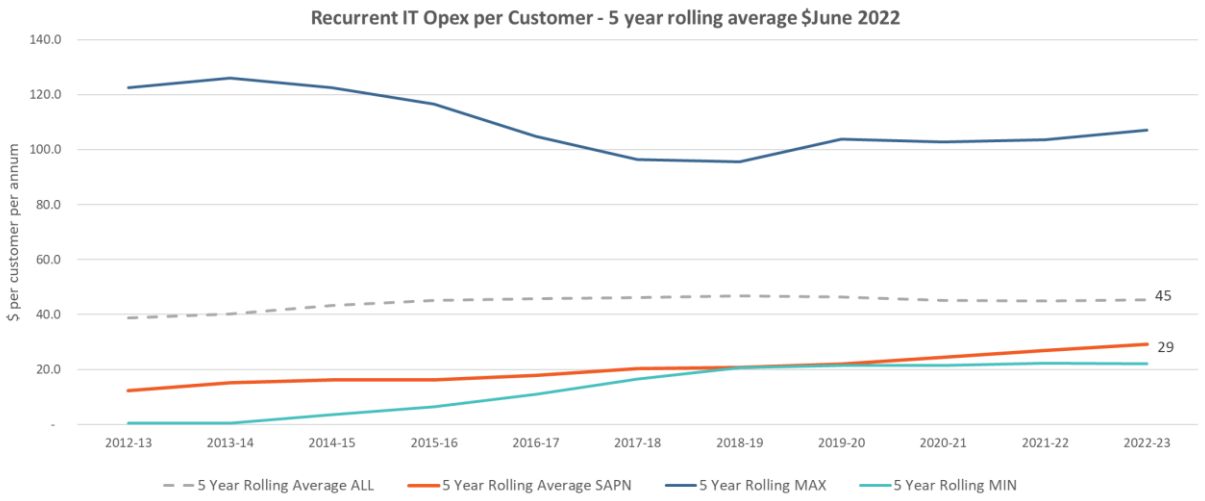


Figure 6: Compared to all the DNSPs in the NEM: IT Recurrent Opex per customer – 5 year rolling average.

Figure 7 shows that SA Power Networks IT performs on the average for the NEM based on IT recurrent totex (capex + opex) per customer. Our objective is to remain around the average for the long term, given the need to balance the requirements to be as efficient as possible while still maintaining and evolving services in an extremely dynamic energy environment.

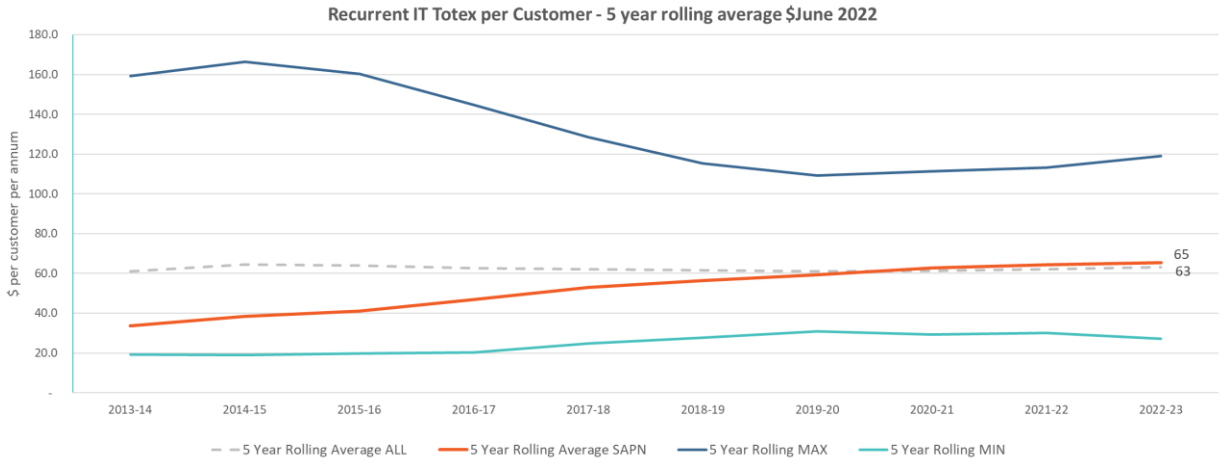


Figure 7: Compared to all the DNSPs in the NEM: IT Recurrent Totex per customer – 5 year rolling average.

6.2 IT capex performance summary

Our IT capex performance for the 2020-25 RCP compared to allowance is summarised in Figure 8. We are forecasting an overspend of $29.8 million or 10.4%. This increase reflects the increasing demand for IT services as well as the increasing levels of change across the shifting technology landscape.

The variations in the expenditure sub-categories are summarised below.

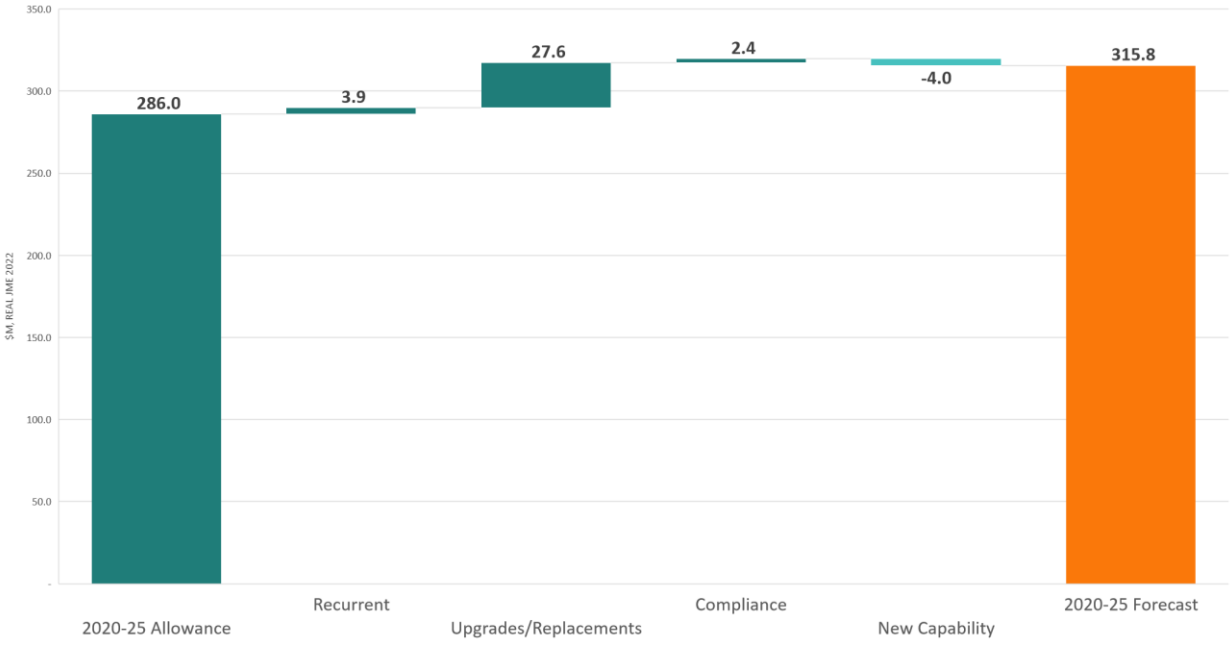


Figure 8: IT Capex 2020-25 Allowance vs Forecast, and major changes by expenditure subcategory.

1. **Recurrent:** Our IT Recurrent capex is forecast to be marginally above allowance ($3.9 million) due to increases in a number of areas including client devices (a transition to portable devices due to hybrid working, and an increase in the number of our client devices due to cyber security requirements and to avoid sharing devices) and infrastructure (increasing the security and reliability of connections to Cloud services).
2. **Large Replacements and Upgrades:** An increase of $27.6 million is forecast compared to the allowance reflecting:
    a. A $12.9 million 'cost shift' in the Billing Replacement Program because of a minor delay in a payment, which shifted the cost from the previous RCP to the current one.
    b. A $14.7 million increase due to a variety of medium system upgrades and replacements that were not foreseen when the allowance was being determined.
3. **Compliance:** We forecast an increase in our 'New or Altered Compliance' of $2.4 million, principally due to the extensive 'Single Touch Payroll' compliance requirements required by the Australian Tax Office and which came into force during the RCP.
4. **New Capability:** The forecast underspend of $4.0 million in this category is due to prudently reducing expenditure on the Assets and Works Program in order to reassess and reprioritise the work delivery improvements, given the large uplift in required network expenditure that has been identified as a result of the previous stages of the Assets and Work Program.

6.3 Delivering IT effectively

SA Power Networks is continually seeking to deliver technology services in cost effective, innovative and agile ways while keeping pace with the rapid changes in our marketplace and in customer use of digital technologies.

In our 2020-25 IT investment proposal SA Power networks laid out a plan to:

- Maintain our existing services and risk through prudent recurrent refreshes, including commencing the shift of our infrastructure to Cloud services and implementing the associated uplifts in capability to keep Cloud secure and manage our costs;
- Complete a number of critical core system replacements, upgrades and consolidations, including our billing system replacement and our ERP Upgrade;
- Respond to evolving compliance requirements, including the increasing requirements for cyber security and ring-fencing; and
- Improving our data collection, decision making and modelling for network asset management.

Figure 9 highlights the key programs and projects during this RCP. Detail regarding the successful completion of the 10 largest of these is provided in section 6.3.1, the Post Implementation Review Summary (below).

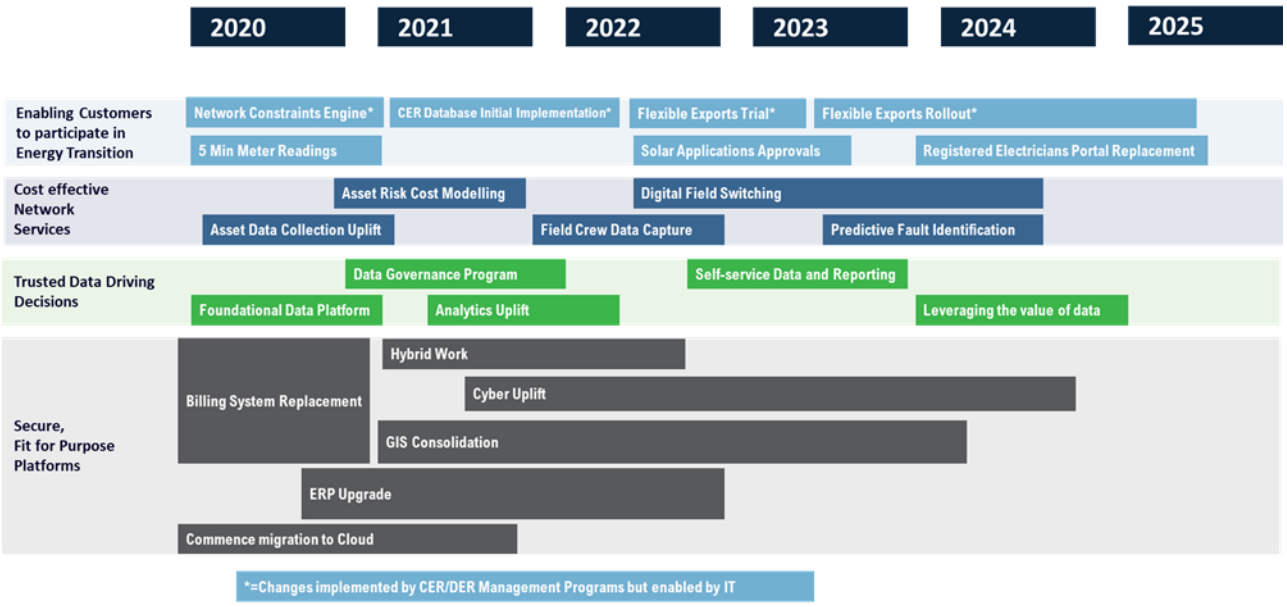


Figure 9: IT Enabled Strategic Changes during the 2020-25 RCP.

We are on target to complete a number of other planned programs and projects that are still underway at the present time including:

- Consolidating our GIS systems;
- Replacing our Protection Settings System;
- Increasing our Cyber Security to the required levels of Australian Energy Sector Cyber Security Framework (**AESCSF**) maturity and capability; and
- Continuing to enable improvements in asset data collection and prediction to facilitate the ongoing cost-effective delivery of our network assets programs.

In addition to these planned changes, we have responded to a number of emergent changes including:

- The shift to the hybrid work environment during and after Covid.
- The increased focus on collecting, using and governing significantly increased volumes of data as cost efficiently as possible, driven by the increased focus on evidence-based decision-making as well as the increased cyber and privacy requirements on our data. This has driven an increase in the number of systems related to data governance, analytics and intelligence.
- A number of additional unplanned upgrades or replacements, including commencing replacement of the Registered Electricians Portal.

6.3.1 Post Implementation Review Summary

The AER requires that we provide Post Implementation Reviews (**PIRs**) for recent ICT investments order to

- increase the transparency of the ICT expenditure; and
- improve understanding of businesses' forecast of ICT benefits in expenditure proposals.

This PIR should include performance related to costs, timeframes and benefits.[11]

Table 4 summarises the 10 largest projects completed in the 2020-25 RCP up to July 2023, and the required information.[12]

The total value of the investment was $139.4 million, with the majority being in two large and complex projects – the Billing System Replacement, $79.8 million, and the SAP ERP Upgrade at $28.0 million.

Actual Expenditure vs. Budget

Sixty percent (60%) of the projects were completed on or slightly under the planned budget, with a total cost overrun of less than 1% across all projects.

Schedule

Half (50%) of the projects were completed on time, with the remainder on average 1 month or about 11% later than planned. The schedule variations did not translate to material cost increases and were necessary to ensure we delivered the best outcomes for our business and customers.

Benefits vs. New Recurrent Costs

We did not anticipate significant quantifiable financial benefits from these projects given they were predominantly focused on refresh, replacement, compliance or foundational activity. We also anticipated that the new recurrent costs would be more than the quantifiable benefits. In actuality, the total financial benefit from the projects was $4.2 million per annum (slightly better than expected), which was used to partially offset the increase in recurrent costs of $7.8 million per annum (also slightly higher than expected).

Key Lessons learned

On the large complex projects, having all the key vendors on the steering committee ensured complete buy-in and focus for all stakeholders, leading to higher quality and more timely outcomes, with all entities behaving as a single team with a shared set of goals and outcomes. We also identified that we

[11] *AER, 2019, Non-network ICT capex assessment approach, p.13.*
[12] *More detail is provided in the document "2020-25 ICT Post Implementation Reviews".*

underestimated the technical complexity on some of the smaller projects. As a result, we have introduced additional steps in our solution design process to improve our estimation.

Summary

The overall results demonstrate a very tightly managed portfolio of IT investments with small variations in costs, schedules and benefits when compared to the business cases.

6.4 Customer Outcomes

SA Power Networks' ICT has undergone a cycle of significant change as we first remediated, and then cost effectively replaced or upgraded our oldest and highest risk systems (e.g. Billing, SAP ERP). At the same time, we have enabled new capabilities for improved network asset decision-making and risk management, and to facilitate the energy transition.

The key outcomes from a customer perspective are:

- Minimising our ICT costs through very effective management of a high-risk portfolio of change, while maintaining our existing customer services and enabling new ones;
- Improved our ability to understand our network assets and understand the long-term management requirements and costs for those assets;
- Implemented the technology to create new customer services such as flexible exports, which in turn enable customer participation in the energy transition;[13]
- Created and augmented the cyber security capabilities to secure the electricity network and customer data; and
- Implemented a set of new strategic technology platforms which we can now cost-effectively leverage to respond to the continually evolving energy services.

[13] *The specific costs associated with the refresh and expansion of the AER defined 'DER capabilities' are in the DER expenditure category not IT expenditure. This definition is principally around enabling and facilitating energy export capabilities. DER capabilities though are only a component of the capabilities required to enable the energy transition.*

Table 4: Post Implementation Review Summary ($million, Dec $2020) [14]

Expenditure Category/Project	Actual Expenditure	Actual Expenditure vs Internal Business Case	Schedule Variance	Actual Benefits	Benefits Variance to Business Case	Actual New Recurrent Costs	New Recurrent Costs Variance to Business Case
Recurrent							
Client Devices Refresh: Field Device Refresh	$5.5m	3%	On time	$0.06m pa	0%	$0	0%
Applications Refresh: Microsoft Platform	$1.6m	7%	2 months	$0.3m pa	0%	$0	0%
Infrastructure Refresh: Tranche 1 to Cloud	$4.2m	2%	5 months	$0.8m pa	0%	$1.3m pa	52%
Infrastructure Refresh: Cloud Integration	$2.8m	16%	On time	$0	0%	$0	0%
Non-Recurrent: Large Replacements & Upgrades							
Billing System Replacement	$79.8m	0%	2 months	$2.6m pa	63%	$5.2m pa	0%
SAP ERP Upgrade to S4	$28.0m	0%	1 month	$0	0%	$1.2m pa	0%
Non-Recurrent: Compliance							
Five-Minute Settlement Rule Changes	$8.8m	7%	On time	$0	0%	$0	0%
Ring-fencing: Separate Company Code for Unregulated Business	$3.5m	35%	2 months	$0.2m pa	0%	$0	0%
Non-Recurrent: New and Expanded							
Assets & Work: Asset Risk Cost Model	$2.2m	0%	On time	$0	0%	$0	0%
Assets & Work: Asset Information Foundations	$3.1m	38%	On time	$0.2m pa	0%	$0	0%
Total All Projects	**$139.4m**	**0.9%**	**1 month or 11%**	**$4.2m pa**	**31.2%**	**$7.8m pa**	**5.4%**

Variance Legend
Green - on or under planned budget/schedule/expected new recurrent costs; on or over expected benefits.
Orange - over planned budget/ schedule/ expected new recurrent costs; under expected benefits.

[14] These costs are in Dec 2020 and include overheads, reflecting the summary results of the Business Cases and Post Implementation Reviews as written internally.

6.5 Benefits

Table 5 summarises the estimated financial benefits for the whole of the IT investment being undertaken in the 2020-25 RCP. These benefits exclude risk monetisation benefits but include benefits from initiatives currently underway.

Table 5: Benefits Summary – IT Portfolio 2020-25

Benefit Type	Total Benefits 2020-25 ($m)
Cost Avoidance	51.8
Cost Offsets	22.0
Deferral	42.2
Total	**116.0**

The total anticipated benefits from the work commenced to date is $116.0 million, contributing to keeping costs down for customers, including:

- $51.8 million of avoided future customer cost increases. The majority of these benefits ($47.2 million) were attributed to avoiding cost increases associated with undertaking a system change or refresh at the appropriate time i.e., in Recurrent and Large Replacement/Upgrade expenditure.
- $22.0 million of cost offsets. The majority of this, $14.6 million, was cost saving from switching off an old system or version which was then used to offset the cost increase of $15.7 million associated with switching on new system or version. The remaining $7.4 million in savings went towards partially offsetting another $27.5 million of cost increases that were incurred in other areas of the portfolio.
- $42.2 million of prudently deferred network investment, reflecting the improved ability, enabled by the Assets and Work Program, to select the highest risk items for replacement on the electricity network.

7. Proposed 2025-30 IT Expenditure (Capital and new Operating)

- ✓ We have detailed bottom-up business cases justifying all expenditure, modified by top-down portfolio prioritisation and delivery considerations.
- ✓ Our IT recurrent expenditure is returning to normal levels after a planned temporary reduction.
- ✓ Our non-recurrent expenditure of $220.9 million has strong associated benefits of $491.8 million.

7.1 Forecast IT Program

Our proposed IT Program (capital and new operating) [15]for the 2025-30 RCP is $416.0 million, comprising $259.9 million of capex and $156.1 million of new opex. This is a 31.7% increase compared to the 2020-25 RCP actuals/forecast expenditure, reflecting both the commencement of a new cycle of investment plus the increased role and dependence on IT across the business and energy services in general (see Table 2 and Figure 1 above).

Figure 10 summarises the key expenditure changes by Expenditure Category between the 2020-25 and 2025-30 RCPs, as well at the benefits for each category. The key drivers for these changes are highlighted below. Table 6 provides the breakdown by year and Expenditure Category.

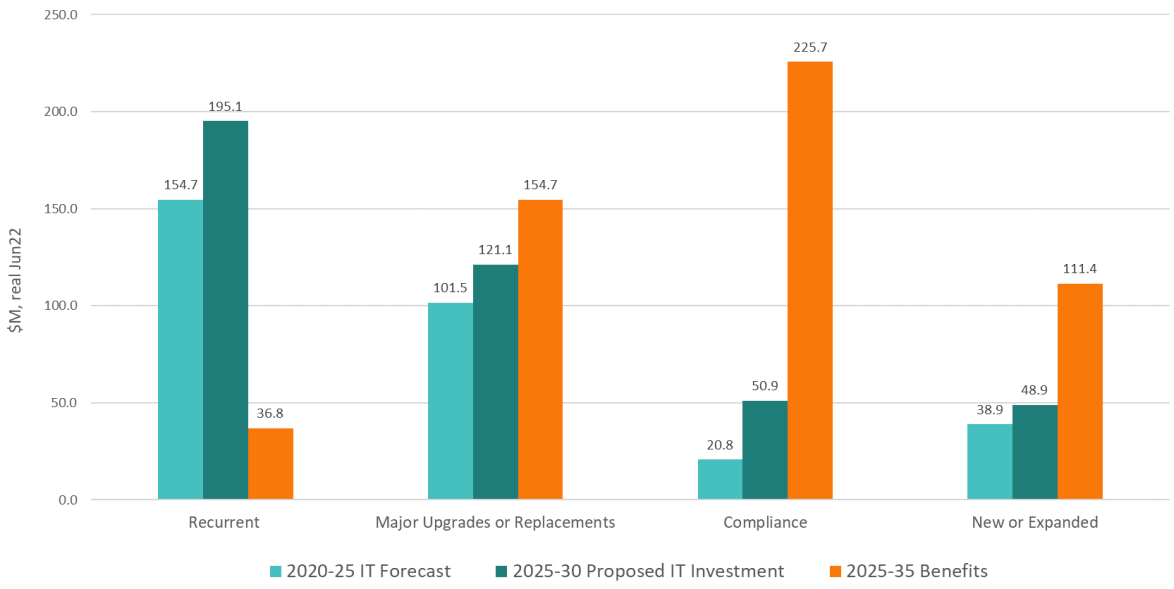


Figure 10: Proposed 2025-30 IT capex and new opex, compared to the 2020-25 RCP Forecast, and 10-year benefits from the 2025-30 expenditure. ($million, June $2022)

1. **IT Recurrent:** The increase in recurrent expenditure of $40.4 million or 26.1% reflects a number of factors coming together:
    a. A return to the long-term trend following a period of reduced recurrent expenditure in the 2020-25 RCP.
    b. The increase in the number of data intensive related systems and applications as new systems were implemented to collect, store and analyse more data to significantly improve our evidence-based network management and decision making.

[15] *For the purpose of this document, we focus only the key changes for capex and opex ie new opex. The total IT expenditure view of capex plus opex is provided in Appendix A, including the recurrent base opex.*

c. The recurrent cost increase associated with the increased number of field staff to manage the significant uplift in network expenditure.

d. Specific increases across a number of other IT asset classes and services as summarised in section 7.2.1 below and in the business cases.

Consistent with the AER categorisation, as this expenditure is recurrent expenditure to maintain existing services, we do not expect significant quantities of benefits (beyond maintaining the existing value and security of our investments), but there are some ($36.8 million), principally for managing risk and cost avoidance for the new data systems.

Table 6: IT Investment Summary (capex & new opex) by expenditure category by year ($million, June $2022)

	2015-20 Actuals		2020-25 Actuals & Forecast					2025-30 Proposed					
Expenditure Category	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total 2025-30**
Recurrent	36.5	34.4	33.6	35.3	28.1	26.1	31.6	39.3	36.0	37.0	41.6	41.2	**195.1**
Replacements / Upgrades	16.4	35.4	43.5	19.7	21.6	7.6	9.0	19.4	24.0	29.6	26.7	21.5	**121.1**
Compliance	5.0	4.6	4.1	10.6	1.5	2.2	2.3	4.5	11.2	11.6	11.2	12.6	**50.9**
New or Expanded	12.5	7.9	6.5	11.0	7.4	5.4	8.6	6.6	9.5	9.8	9.6	13.3	**48.9**
Total Capex + New opex	**70.5**	**82.3**	**87.7**	**76.7**	**58.6**	**41.3**	**51.5**	**69.8**	**80.7**	**88.0**	**89.1**	**88.5**	**416.0**

2. **Major Replacements and Upgrades:** The increase of $19.7 million in the major replacements and upgrades is spread across a number of medium sized systems that are no longer fit for purpose and is driven by a couple of key factors:

   a. The normal cyclical replacement of key systems and/or modules reaching the end of their useful and secure life and requiring replacement in order to maintain our existing levels of service and risk.

   b. A backlog of investment in the systems that directly support customer services. During the 2020-25 RCP our focus was, as planned, on the large-scale high-risk programs (eg. Billing System Replacement, SAP ERP Upgrade) and achieving compliance (eg. Five Minute Meter Reading). We invested the bare minimum in our customer systems to keep them secure and functioning. This has however created a widening gap between the increasing customer requirements driven by the energy transition (plus our increasing cyber security obligations) on one hand and the existing system capability on the other. Our systems have become less fit for purpose over time. During 2025-30 we plan a series of targeted replacements and upgrades to close that gap and enable systems that will be more secure, adaptive and capable in the long term.

This expenditure is expected to ensure about $154.7 million of benefits, across all of the proposed initiatives. The majority of these benefits ($135.8 million) are associated with avoiding both the risk and the increased costs associated with not undertaking the work at the appropriate time. For example, the Customer systems replacements will enable improved management of the increased workload during the energy transition, hence avoiding increased business costs and keeping costs down for customers in the long term.

3. **Compliance:** IT is playing a much greater role in our electricity network and in delivering energy services. Our network devices and underlying systems are becoming smarter, enabling us to manage a much more complex and increasingly real time grid, while delivering power reliably to customers. This increase in capability comes with increased risk from cyber security threats. During 2025-30 we expect those threat levels to increase again. In response, we are proposing a program of targeted risk prioritised uplifts in our cyber capabilities and practices. This requires a significant Cyber capability uplift program of $44.7 million, a proposal which was strongly supported by our customer groups. We expect this expenditure will enable approximately $225.7 million of monetised risk benefits, by reducing the opportunity for and consequences of cyber-attacks.

   In addition to cyber, there are two smaller compliance changes we expect during the 2025-30 RCP – both of which are being worked through but are expected to become full compliance requirements during 2024. Hence, we expect we will be updating these proposals during the Regulatory Resubmission once the relevant rule changes or market proposals complete. These are the Energy Security Board Australian Energy Market Operator (**AEMO**) Post 2025 Roadmap initiatives for national market changes and the Australian Energy Market Commission (**AEMC**) proposed Smart meter Accelerated Rollout, as part of the Legacy Metering Transition.

4. **New or Expanded Capability (new value):** Delivering new value to customers is a key objective for ICT investment. For the 2025-30 RCP, we are seeking an increase in our new value expenditure by $10.0 million – to $48.9 million. This overall investment will deliver $111.4 million in benefits (10 year). The key sources of these benefits are through improving select customer related business process and information flows and through the continued improvements in our network asset replacement and augmentation programs. We have already reduced our network assets proposal by $39.5 million in expectation of the allowance being granted.

7.2 Maintain Existing Service: Recurrent IT Program

Table 7: Proposed IT Recurrent expenditure (capex & new opex) by Business Case ($million, June $2022)

			2025 – 30 Proposed Investment			
Business Cases	**2020-25 Allowance**	**2020-25 Actuals/ Forecast**	**Capex**	**New Opex**	**Total 2025-30 Funding Request**	**Compared to 2020-25 Actuals/ Forecast**
Client Device Refresh	25.8	29.4	32.1	-	**32.1**	9.3%
Cyber Security Refresh	12.8	13.3	-	15.3	**15.3**	15.1%
Data, Analytics and Intelligent Systems Refresh	Inc. in IT Applications Refresh	11.4	11.9	2.9	**14.8**	29.6%
IT Applications Refresh	77.4	61.2	62.8	14.4	**77.2**	26.1%
IT Infrastructure Refresh	31.5	36.5	34.1	8.8	**42.9**	17.5%
Network Uplift Resourcing – Ongoing IT			1.9	10.9	**12.7**	100.0%
Other	3.4	2.8			-	
Total	**150.8**	**154.7**	**142.9**	**52.2**	**195.1**	**26.1%**

Our IT Recurrent expenditure is focused on maintaining our existing levels of service and risk, and maintaining the value of investment in our systems, services and devices, for those systems and service in place as at the start of the RCP (ie. 1st July 2025). This is done through the periodic refresh, security patching, small upgrades and small enhancements to all our IT asset classes – maintaining secure, compliant and usable systems and devices, while keeping pace with small changes. We provide detailed bottom-up business cases for each of the key IT asset classes and sub classes to justify our forecast.

7.2.1 Recurrent IT Capex and New Opex Summary

Our proposed IT Program (capital and new operating) for the 2025-30 RCP is $195.1 million, being $142.9 million of capex and $52.2 million of new opex. This is a 26.1% increase on the 2020-25 RCP actuals/forecast, although only 12.7% above the historical RIN reported average for the last 8 years (2015-23) – see Figure 11.

The reasons for the increase compared to the 2020-25 RCP are due to:

- Portfolio Delivery Factors: As detailed previously, we prudently planned a reduction in our recurrent expenditure while the very large non-recurrent refresh programs were being undertaken (eg. SAP ERP Upgrade, GIS Consolidation), expecting that these programs would take up some of the recurrent activity in their scope. We expected the recurrent expenditure to increase again in order to maintain the newer systems and investment value going forward, as well as to take into account the additional capabilities and systems that have been implemented as part of the non-recurrent programs over the past few years.
- During the 2020-25 RCP, the use of IT across the network and business continued to expand, driving an increase in requirements for recurrent investment across all IT asset classes – and reflected in an increased expenditure compared to the allowance. The key changes are:
  - The significant expansion of centralised systems to manage, analyse and use data, particularly to improve asset-based decision-making and facilitate more timely and effective operational network decision-making. (This was previously a subset of IT Applications but is now strategically a new class of Data, Analytics and Intelligent Systems).
  - Increases in cyber security investment to maintain the required uplifts in cyber maturity levels, which were implemented during the 2020-25 RCP, and the material increases in the risks and the resultant capabilities for many activities within the operations and digital identity areas.
  - Increases in IT Infrastructure costs due a larger set of network hardware needing replacement in the 2025-30 RCP, as well as the ongoing growth factors driven by the increased amount of data in general and smart meter data in particular.
  - A transition to portable devices due to hybrid working, and an increase in the number of our client devices due to cyber security requirements and to avoid sharing devices.
  - An increase in the number of mobile applications used to obtain accurate and reliable network data, but now needing to be refreshed on a recurrent basis.
- An increase in the IT costs due to the large increase in the number of field and support personnel resources as part of the uplift in the overall network program (replacement, augmentation, CER and connections).[16] These costs reflect the recurrent uplift for these resources and not a new or expanded IT capability and hence are classified as part of the IT recurrent expenditure.

[16] *See the separate business case 5.2.5 - Resourcing Plan for Delivering the Network Program.*

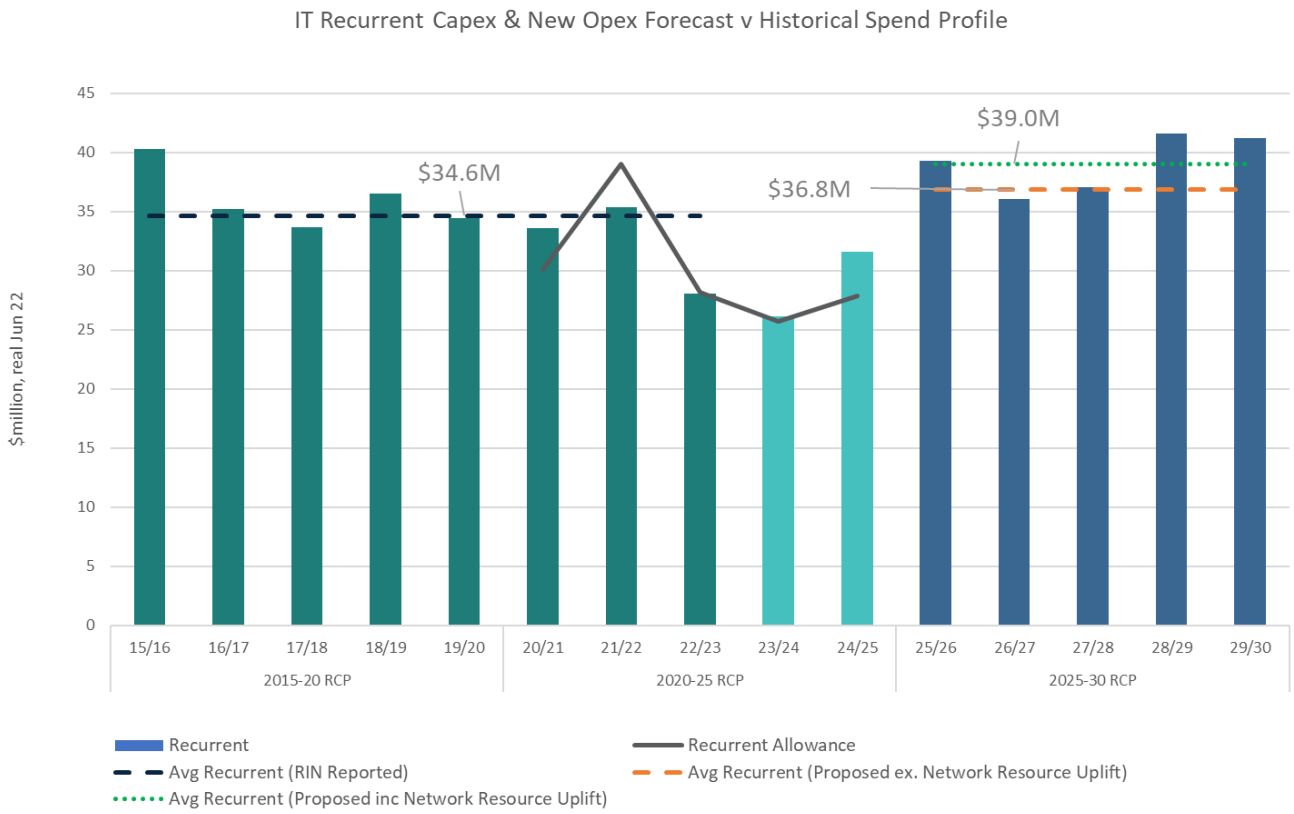


Figure 11: IT Recurrent Expenditure (capex and new opex) – historical trends 2020-25 Allowance and Actuals, and the 2025-30 forecasts ($million, June $2022).

As shown in Figure 11, the largest variation in the IT recurrent expenditure for the 15-year view is due to the planned temporary drop in the recurrent allowance from 2022-2025. Excluding the new Network Resourcing Uplift, all of the changes listed above have only increased the average expenditure by 6.4% or $2.2 million per annum compared to our RIN reported long-term trend.

High level business case summaries are provided in Appendix B.

7.2.2 Opex Changes

There is a significant shift in the quantum of new recurrent opex being requested, with a total of $52.2 million proposed.

The change reflects a number of key factors at work:

- The increasing proportion of our systems that are, or are transitioning to, SAAS and therefore the recurrent refresh costs needed to transition from capex to opex.
- The operationalising of our cyber security capabilities, which are increasingly process-based rather than based around a specific asset, and therefore must be treated as opex from an accounting perspective.
- The increasing support and software costs associated with an increasing number of field staff to facilitate the increased network asset delivery program.
- Opex uplifts to meet capacity and market requirements driven by the shift of technology to the cloud. To manage server growth and storage capacity requirements in the past we would have purchased more hardware using capex. As our systems are shifting to the Cloud this capacity increase must be handled via recurrent opex increases.

The opex changes are discussed in more detail in section 8 below and justified in the business cases.

7.2.3 Customer outcomes

The overall value these IT recurrent capex initiatives deliver needs to be considered as a whole, as they act together to deliver significant 'business as usual' benefits to customers. For example, IT supports the business services that allow electricians to book appointments online, and the service for customers to report a streetlight not working, through pinpointing it on an online map for us to resolve – with us notifying the customer when the light is fixed. These customer services require **all** of the IT capabilities (applications, client devices, infrastructure and cyber security) to be operating reliably together to deliver the service.

This IT recurrent investment will ensure that:

- current customer and business service levels are maintained;
- our IT systems are reliable, secure and available – particularly during customer outages;
- we are able to continue to deliver efficient asset deferral savings to customers while managing our risk; and
- we will be able to respond to emerging cyber security threats in a timely manner.

Not funding these initiatives will expose the business to an increasing and unsustainable level of risk affecting the ability to deliver a reliable and safe service to our customers, as in these examples:

- The failure of customer, outage management and network finance systems exposes the business to significant financial, work health and safety, regulatory non-compliance and customer service risks.
- We will be unable to maintain a responsive cyber security capability risking the confidentiality, integrity and availability of information assets, as well as risk the continuity of supply of distribution services.
- The stability of systems could be compromised when patches and upgrades are not applied in a timely manner. This includes vendors being unwilling to provide support/assistance until systems are at the latest patch version.
- Maintenance costs will be higher when implementing workarounds to issues resulting from unpatched systems where the issues have been addressed in current releases.
- Upgrade costs will be higher due to outdated systems requiring a more complex upgrade process.
- Less functionality is available from existing systems due to outdated software, providing lower value to customers and the business.

7.3 Maintain Existing Service: Non-Recurrent ICT Program – Large Upgrades and Replacements

Maintaining our existing IT services necessitates that we undertake large periodic programs or projects to manage our technology risks through upgrade, replacement or consolidation activities driven by system lifecycles, the inability to meet evolving requirements or the desire to simplify our technology environments and keep a lid on costs.

Some of these initiatives will incur additional IT recurrent costs. These new costs are driven by the licensing or support costs for the new or upgraded system being greater than that for the old. SA Power Network's will not request a step-change allowance for these recurrent cost increases but instead will seek to use benefits from across the whole of IT portfolio to offset the costs. In doing so we are contributing to our overall productivity improvements as a company and to keeping costs down for our customers.

Table 8 summarises the proposed initiatives in this category.

Table 8: Proposed ICT Non-Recurrent: Large Upgrades & Replacements expenditure and benefits by Business Case ($million, June $2022)

	2025 – 30 Proposed Investment						
ICT Business Cases	Capex	Non-Recurrent Opex	Additional IT Recurrent	Total 5-Year Costs	Offset IT Recurrent Increases with Benefits	**Total 2025-30 Funding Request**	Benefits (10 year)
Customer Technology Replacement Program							
CRM Replacement & Data Consolidation	3.1	9.4	4.4	16.9	4.4	12.5	23.8
Customer Notification System Replacement	10.2	-	0.4	10.5	0.4	10.2	22.6
Meter Data Insights System Replacement	0.4	1.7	0.1	2.3	0.1	2.1	6.7
Customer Portals Consolidation	2.7	9.7	1.2	13.7	1.2	12.5	16.2
Website Replacement	0.3	2.1	0.3	2.8	0.3	2.5	8.4
Total Customer Program	**16.8**	**23.0**	**6.5**	**46.2**	**6.5**	**39.8**	**77.7**
Other Systems							
Click Replacement	3.9	14.3	0.6	18.8	0.6	18.2	19.9
Enterprise Data Warehouse Replacement & Consolidation	14.2	1.8	1.3	17.4	1.3	16.1	24.4
Integration Platform replacement	13.0	-	-	13.0	-	13.0	27.4
SAP Small Module Lifecycle Management & Optimisation	12.3	1.0	1.7	15.1	1.7	13.4	5.3
Service Order Module Replacement	20.7	-	-	20.7	-	20.7	-
Total Other Systems	**64.2**	**17.2**	**3.6**	**85.0**	**3.6**	**81.4**	**77.0**
Total	**81.0**	**40.1**	**10.1**	**131.2**	**10.1**	**121.1**	**154.7**

To ensure efficiency of delivery and to maximise our customer benefits we have combined a number of these initiatives into a 'Customer Technology Replacement Program'. This is more thoroughly summarised in the Customer Technology Program Overview document[17]. The ageing customer technologies pose a threat to our ability to maintain current service levels. This imminent challenge is anticipated to result in increased costs, heightened risks including increasing cyber security risk and a less than optimal customer experience. The objective of the program is to de-risk, modernise and simplify the technologies in alignment with our customers' expectations for cost efficient and seamless experiences, as illustrated in Figure 12.

As noted previously, during the 2020-25 RCP we did not invest in these systems, focusing on billing replacement and achieving compliance. During the 2020-25 period we also observed a considerable **276%** increase in customer interactions as the increasing complexity in the energy sector has directly affected the demand for customer services. This upward trajectory in customer services demand poses a significant challenge, placing additional strain on our ageing customer technologies. While the primary focus for this program is managing system risk, we do expect significant cost avoidance benefits arising from using more modern technology to avoid increasing our headcount despite expected increases in the number of customer interactions and issues.

We have identified approximately $77.7 million of benefits for the proposed $39.8 million of requested expenditure for the Customer Replacement Program. This expenditure also enables the systems that are leveraged by the proposed "Personalised on demand services" project, under the "New or expanded capability", to deliver another $21.4 million in benefits.

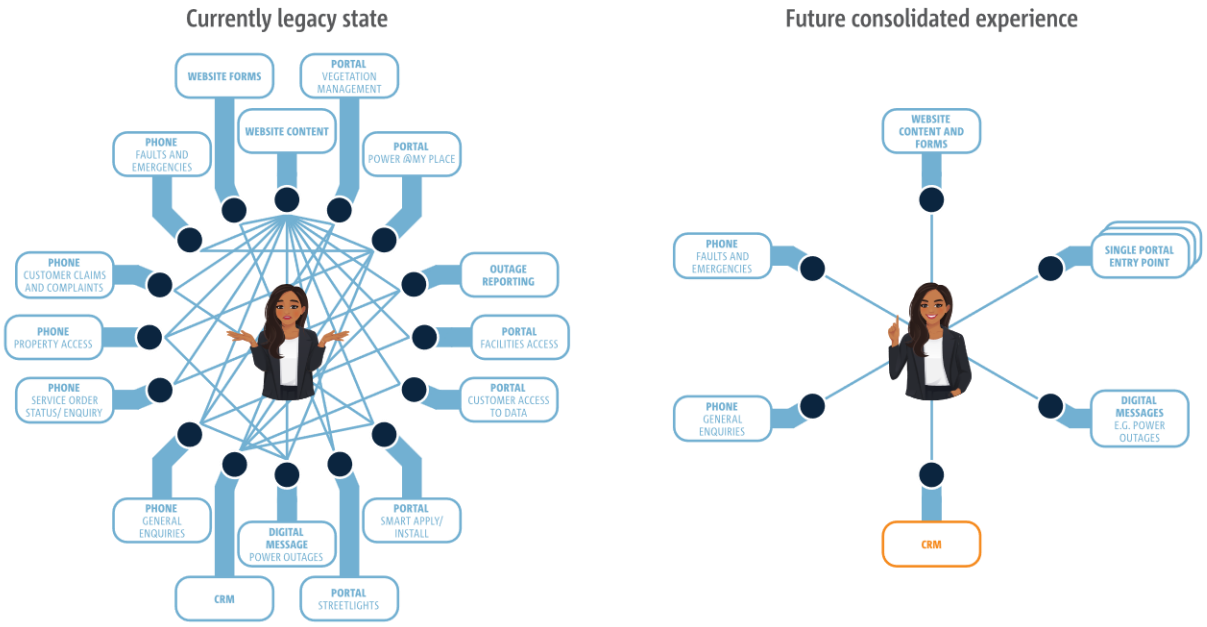


Figure 12: A representation of customer interfaces and services before and after legacy system replacement

In addition to the Customer Replacement Program there are a number of other large system upgrade and replacements driven by vendors ceasing support during the 2025-30 RCP. In all instances we explored delaying the replacement or upgrades to subsequent RCPs. Where viable, we also plan to extend support as long as it is available to us in order to maximise the life of the existing assets.

By nature, we do not expect new benefits from large upgrades and replacements – which are fundamentally about maintaining existing services. However, across all the upgrades and replacements projects we have identified benefits of $154.7 million, which are larger than overall program costs of $121.1 million.

[17] *5.12.27 - Program Overview - ICT Non Recurrent Customer Technology Program.*

In addition, we expect additional recurrent costs of $10.1 million across this category of expenditure (due to newer systems generally being more expensive than old) but we will seek to offset this using benefits elsewhere in the portfolio – meaning that customers will not be asked to pay for this additional cost.

High level business case summaries are provided in Appendix B.

7.4 New Compliance: Non-Recurrent ICT Program

Meeting new compliance requirements is required for SA Power Networks to continue to deliver safe and reliable energy services and maintain our Distribution licence. Table 9 summarises the key programs in this category.

Table 9: Proposed ICT Non-Recurrent: Compliance expenditure by Business Case ($million, June $2022)

	2025 – 30 Proposed Investment					
ICT Business Cases	Capex	Non-Recurrent Opex	New IT Recurrent Opex	Total IT Costs	Total 2025-30 Funding Request	Benefits (10 year)
Cyber Security Uplift	2.6	26.2	15.9	44.7	44.7	225.7
Legacy Metering Transition – Towards 2030			4.2	4.2	4.2	
ESB AEMO Post 2025 Roadmap Initiatives	2.0			2.0	2.0	
Total	**4.6**	**26.2**	**20.2**	**50.9**	**50.9**	**225.7**

During 2020-25 RCP we were required to uplift our cyber security levels to manage the increasing threats on a technology enabled grid. During the 2025-30 RCP we need to move to the next levels of cyber maturity as the threats continue to evolve. As such we are proposing to continue to invest in uplifting our cyber capability, with a program of prioritised changes based on our key identified cyber risks.

In addition, significant changes are also being undertaken in the national market to facilitate the energy transition and the increased secure access to greater volumes of customer energy data. These include:

- The AEMC proposed accelerated rollout of smarter meters by 2030 to enable greater access to quality energy data; and
- A number of initiatives being driven by AEMO as part of the Energy Security Boards (**ESB**) Post 2025 market reform roadmaps enable the secure flow and greater sharing of energy data across the national market. We expect this will result in compliance requirements on SA Power Networks during 2024 and hence will need to be actioned during the 2025-30 RCP.

We have developed initial costs for both these initiatives which we expect to refine during 2024 as expectations, rule changes and timelines become clearer.

High level business case summaries are provided in Appendix B.

7.5 New or Expanded Capability: Non-Recurrent ICT Program

The programs and projects in this category create new value. The benefits they deliver are tangible and, where possible, reflected in reductions in other areas of the Regulatory proposal. Table 10 summarises the key programs in this category.

Overall, we expect $111.4 million in 10-year benefits from an investment of $48.9 million in the 2025-30 RCP.

Table 10: Proposed ICT Non-Recurrent: New or Expanded Capabilities expenditure by Business Case ($million, June $2022)

	2025 – 30 Proposed Investment						
ICT Business Cases	Capex	Non-Recurrent Opex	Additional IT Recurrent	Total 5-Year Costs	Offset IT Recurrent Increases with Benefits	Total 2025-30 Funding Request	Benefits (10 year)
Customer Technology Program: Personalised on Demand Services	1.2	7.4	-	8.6		8.6	21.4
Assets & Work Phase 3 (Asset Management Transformation Program)	30.2	10.1	-	40.3		40.3	90.0
Total	**31.4**	**17.4**	**-**	**48.9**		**48.9**	**111.4**

As noted, the "Personalised on Demand Services" Project builds on the Customer Replacement Program to deliver improved online services and experience to customers – saving them time and effort, as well as delivering efficiencies in our internal processes.

The Asset Management Transformation Program is the next phase of our Assets & Work (**A & W**) Program designed to continue to improve the unit costs for our network delivery programs. We have reduced the SA Power Network's total network assets capital funding request by $39.5 million to reflect the improvements we expect in the 2025-30 RCP from the $40.3 million in IT investment. An additional $50.5 million in benefits is expected in the 2030-35 RCP.[18]

High level business case summaries are provided in Appendix B.

7.6 IT Portfolio and Deliverability

Figure 13 presents the proposed IT portfolio, showing the key initiatives that have been included in our business cases.

The following factors were considered in the build-up and design of the portfolio.

1. **We have already delivered a portfolio of similar magnitude over the last 10 years,** with more complex technology changes, without impacting on customer services and while effectively responding to significant changes to electricity services.

[18] *See SA Power Networks 2025-30 Regulatory Proposal, Attachment 5 – Capital Expenditure.*

2. **We have a long history of successful estimating on projects and delivering on those estimates, as demonstrated in the summary of our IT Post Implementation Reviews.** Our estimating process, for non-recurrent changes, involves both our own past experience and significant input from expert third parties and suppliers to arrive at reasonable costs and benefits.

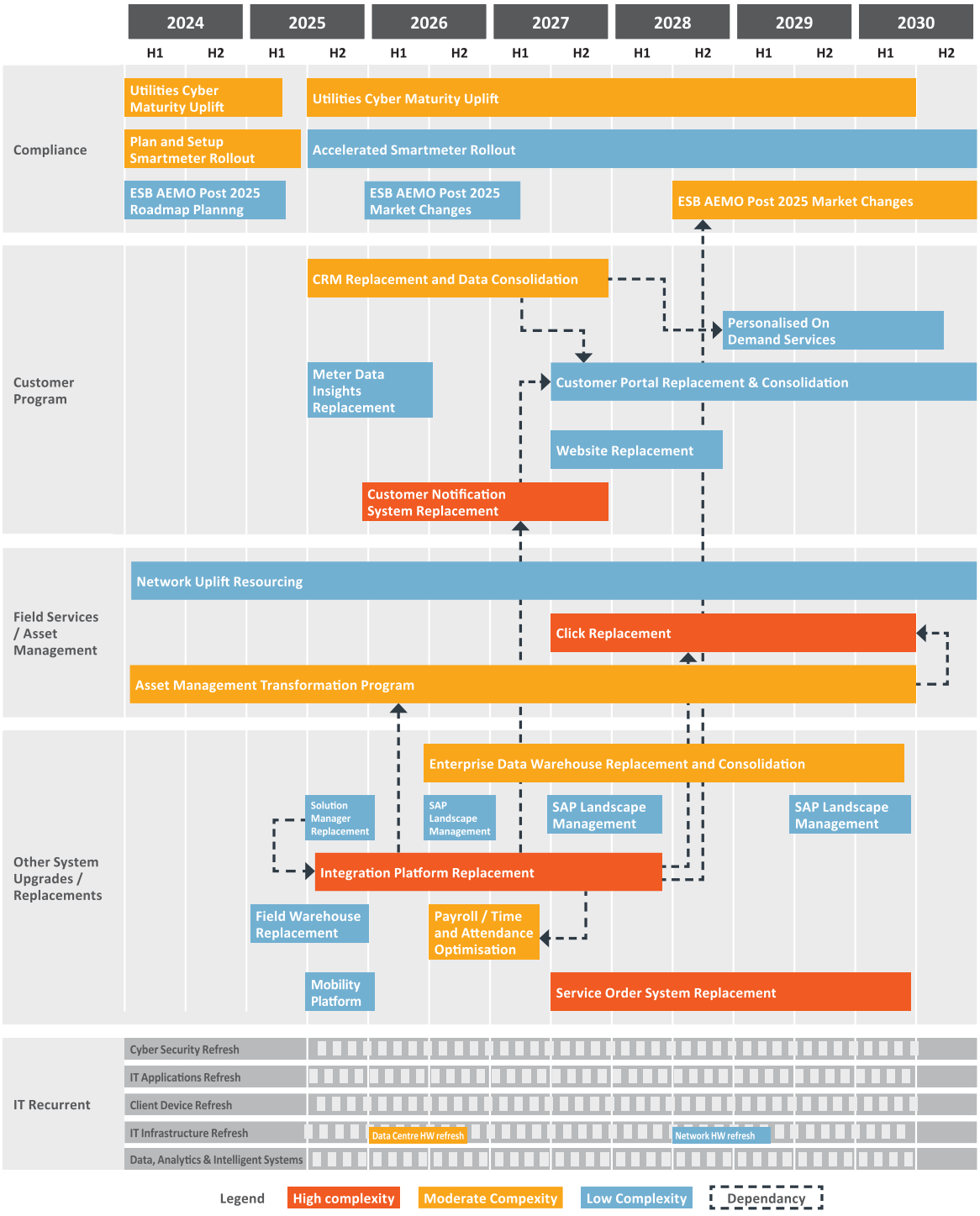


Figure 13: IT 2025-30 Portfolio Diagram

3. **Our portfolio build up is based on need** – maintaining existing services through recurrent programs first – then the larger non-recurrent programs – being necessary systems upgrades and replacements, then compliance changes and finally new value activity.
4. **We only proposed the Program and Projects that are delivering the highest benefit and/or managing the most risk.** Several proposed business cases did not make it on to the final 2025-30 portfolio and were deferred to 2030-35 or beyond based on their inability to justify a sufficient level of benefit or risk reduction in the 2025-30 RCP. These include:
    - Replacement of some of the customer portals
    - Business improvements in Human Resources and Finance
    - Replacing our switching outage management system
    - Replacing our estimating system
    - Improvements in SAP
    - Improvements in GIS.
5. We have carefully considered the design of our whole portfolio in order to maximise the outcomes for our customers including:
    a. As shown in Figure 13 above, **we have taken into account the complexity and the impacts of each change to ensure the risks are spread across the RCP, in order to minimize the impact on customer services and to minimize the chances of a cost overrun.** We have spread the risk of delivering on the high complexity changes over the period. This includes consideration of the underlying workgroups to ensure that one service is not being impacted by multiple changes at the same time. For example, attempting the run the Integration Platform Replacement and the Service Order System replacement would place billing and market services at risk. Doing the Click and Customer Notification Systems Replacements at the same time would significantly impact on Field Services. Hence, we have carefully placed these changes on the portfolio. Lower impact or complexity projects of a more ongoing nature or only impact on a specific service have been worked around the larger changes.
    b. **We have grouped related projects into programs to enable the efficient sharing of resources and hence the lowest cost to delivery.** Our recurrent programs of work are organised into ongoing workstreams, which are further broken down and managed using a mature Agile approach to deliver the “next highest value” piece of work in a continuous stream. For non-recurrent expenditure, two larger programs emerged from this analysis – the Customer Technology Program – which brings together six customer systems related initiatives - and the Cyber Uplift. We have planned these activities as programs, which are about 15% - 20% more cost effective than running the proposed changes individually.
    c. We have **Identified and leveraged the key program/project dependencies** in the portfolio, which will enable the most efficient delivery of the portfolio and help contain our long-term costs. These dependencies act as enablers to the projects that comes after them – and our plans assume they are in place. Two projects stand out in particular for their ability to enable other changes (Figure 13).
        i. Integration System Replacement: Integration is fundamental to all our customer and business services and data flows. Replacing the integration system early in the period allows all of the subsequent projects to use the new software, minimising the cost of the change to them.
        ii. CRM Replacement and Data Consolidation: The CRM is the core platform for the Customer Program, enabling the changes and the benefits for the rest of the Program. Hence it is placed early in the RCP as well.

d. **We have taken into account the impacts of the other significant organisational programs** e.g. the network uplift and CER related changes – in the delivery of our portfolio. Most of these changes tend to be of an ongoing incremental or restricted to specific services, but there is a relationship between the timing of Click Replacement and a number of the AMTP changes which has been considered.

e. **Delivering customer benefits and outcomes as early as possible within the portfolio.** Most of the benefits are of a cost avoidance or cost/risk minimisation nature, and the realisation of these have been taken into account in terms of the factors such as dependences already listed above. In the AMTP there are some harder cost reduction/management benefits and we have prioritised the key changes that will enable the benefits to start as early as possible in the RCP.

6. We have **planned a realistic and sustainable increase in the portfolio activity** over the initial years of the RCP, based on our own past experience, in order to ensure a smooth build-up of capability and ensure we deliver on our proposal. Figure 14 shows the yearly breakdown of labour (which tends to need more lead in and planning) from the non-labour components (which tends to not need as much lead in or planning) for our proposed expenditure. We have considered the skills requirements and availability, which can be a constraining factor for delivery. Key points to note that will assist us to deliver this increased activity are:

   a. We will commence the build-up in 2024, well ahead of the transition to the next RCP.

   b. SA Power Networks IT has a mature, flexible and well used resource augmentation model with long term contractual arrangements with key suppliers and system integrators across Australia. This enables us to cost efficiently source and ramp our resources up and down as required for the portfolio of work. The Billing Replacement and the SAP ERP Upgrades are good examples where this worked very effectively for large workforce augmentations. The magnitudes of the increases from one year to the next are consistent with what we have done successfully in previous RCPs.

   c. We have reliable and effective approaches to managing high demand skills such as cyber security and advanced data science capabilities, which we consider will be issues in the next RCP. We have built an ecosystem of partnerships that has allowed us to grow and ramp these skills internally – utilising tertiary educational institutions and software suppliers- augmented by targeted training from national and international experts. More detail on this is provided in the relevant business cases.

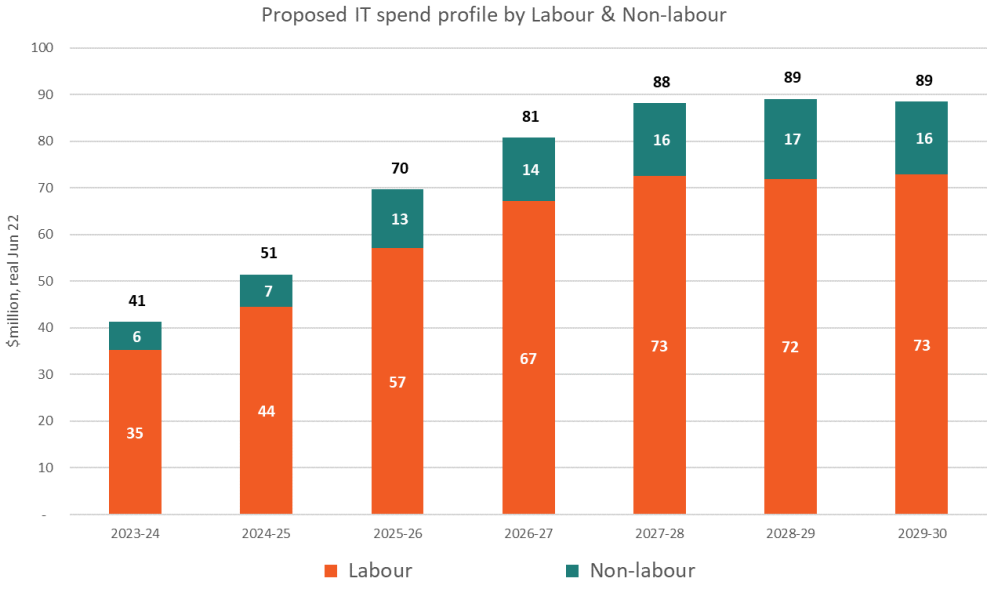


Figure 14: Labour and non-labour components of the proposed IT expenditure

Overall, our portfolio plan delivers on the required outcomes, spreads delivery risk across the RCP, minimises the cost and impact to normal operations and to customers while providing consistent opportunity for the delivery of outcomes and benefits across the RCP.

7.7 Benefits and benefits realisation/application

Our IT investment will deliver significant investment over the upcoming five- and ten-year periods (Table 11). Just over half of the benefit is from managing our risk effectively, particularly managing our cyber risk to the electricity network ($272.9 million). Using technology to effectively avoid expected long term cost increases and/or making the most efficient technology replacement choices to avoid future cost increases adds another $138.9 million. The value of customer time saved through using technology more effectively accounts for $10.7 million. Cost savings benefits amount to $106.1 million over the 10-year period and $43.8 million within the 2025-30 RCP.

Table 11: Five- and ten-year benefits summary by expenditure category ($million, June $2022)

	2025 – 30 Benefits (5 year)					2025 – 35 Benefits (10 year)				
ICT Business Cases	Cost Avoidance	Cost Saving	Customer Time Value	Risk Value	**Total 2025-30**	Cost Avoidance	Cost Saving	Customer Time Value	Risk Value	**Total 2025-35**
Recurrent	-	-	-	14.3	**14.3**	-	-	-	36.8	**36.8**
Non-Recurrent: Large Upgrades/ Replacements	32.8	4.3	1.3	1.1	**39.5**	101.0	12.6	6.3	34.8	**154.7**
Non-Recurrent: New or changed compliance	5.9	-	-	25.6	**31.5**	24.5	-	-	201.2	**225.7**
Non-Recurrent: New or Expanded	1.5	39.5	0.5	-	**41.6**	13.5	93.5	4.4	-	**111.4**
Total	**40.2**	**43.8**	**1.8**	**41.1**	**126.9**	**138.9**	**106.1**	**10.7**	**272.9**	**528.6**

These cost savings translate to benefits that are realisable within an RCP. Table 12 summarises how the $43.8 million 2025-30 RCP cost savings are handled. The majority of these benefits are accounted for by reducing the size of our network assets funding request – by $39.5 million. A smaller set, $4.3 million, will be used to offset recurrent cost increases so we do not need to ask for additional step changes.

Table 12: Realisable benefits handling for the 2025-30 RCP ($million, June $2022)

Benefit	Business Case	5 Year Value	Application
Cost Saving	Asset Management Transformation Program	39.5	Reduced the enterprise asset uplift proposal by $39.5 million
Cost Saving	Multiple	4.3	Will be used to offset expected recurrent cost increases across the portfolio ($10.1 million) and hence avoids the need to ask customer for a step change for those additional costs.
Total		**43.8**	
Productivity		5.8	Absorbed cost. The difference between the expected increase in recurrent costs and the tangible cost savings we can use to offset the cost increases
Total Realisable Benefits		**49.6**	

In addition, as an organisation we have chosen to absorb some recurrent cost increases, $5.8 million, ensuring these are not passed to customers. This is the difference between the expected increase in recurrent costs for the portfolio ($10.1 million) and the possible realisable benefits from the portfolio ($4.3 million).

Appendix C provides the summary of the capex, opex and benefits handling for each business case.

7.8 Our proposed expenditure meets the NER expenditure objectives

SA Power Networks considers that this operating and capital investment is critical to achieving the opex and capex objectives in clauses 6.5.6(a) and 6.5.7(a) of the NER. In particular, the expenditure is required to enable SA Power Networks to:

- ***meet and manage the demand for network services*** – by enabling the effective and efficient operation of SA Power Networks' IT systems, which, in turn, are critical for the effective and efficient operation of the network and meeting and managing the demand for network services;
- **maintain the reliability, security and safety of the distribution system** – by ensuring our IT systems:
  - are maintained within an acceptable level of risk;
  - are secure and minimise the chances and impact of a cyber-attack;
  - continue to respond to changing customer and network needs;
  - remain compatible and continue to support our business processes; and
  - have adequate funding for 'break-fix' services and remediation when required.
- **comply with applicable regulatory obligations and requirements** – while continuing to support customer and business needs; and
- **maintain the safety of the distribution system** – by ensuring our IT systems, that enable the safety and security of the distribution network, are maintained within acceptable levels of risk and are able to response to network changes.

Consistent with the requirements of clauses 6.5.6(c) and 6.5.7(c) of the NER, we consider that the forecast opex and capex is:

- ***efficient*** – because:
  - within each business case we have sought the option which costs the least or that has the best NPV, taking into consideration the risk and benefits; and
  - the expected customer and other benefits from the IT investment have been considered as part of our IT Investment Plan and entire Proposal, resulting in price reductions to customers.
- ***prudent*** – because it:
  - enables our distribution network asset risk profile to meet mandated and agreed levels despite having an aged infrastructure and a changing network environment;
  - addresses the operational risks posed by our IT devices, hardware and applications, and enables SA Power Networks to maintain its existing risk profile;
  - addresses the significant and increasing risks associated with the cyber threats to the electricity network; and

  - addresses the risks associated with our need to maintain compliance with our regulatory obligations and requirements.

- ***a realistic expectation of the demand forecast and cost inputs*** – because the costs of the options in the business cases are based on historical data and past experience from ourselves, our peers and other entities plus estimates from independent suppliers. Our forecasts have been created from the bottom up and then adjusted top down for dependence, resourcing and deliverability considerations. Our past history demonstrates that we have appropriately estimated our costs and delivered effectively to achieve the required outcomes and customer benefits.

8. IT opex step changes, substitutions and base year adjustments

The summary of the proposed IT opex changes is provided below.

8.1 IT opex base year adjustments

We have followed the AER's guidance with regard to the treatment of SAAS related expenditure by reflecting this change in accounting treatment as a base year adjustment in the 2025-30 RCP. This includes both recurrent and non-recurrent opex.

The SAAS related changes are bottom-up builds and hence do not contain any escalation factors that will be captured by the trend and hence there is no double counting.

Table 13 summarises the total funding request across the relevant business cases. The total base year adjustment being sought is $74.8 million.

Table 13: Proposed IT base year adjustments ($million, June $2022) due to the SAAS Accounting Change

AER Category	Business Case	Reason	2025-30 Funding Request
Recurrent	IT Applications Refresh	Patching and updates on SAAS systems.	14.4
	Data, Analytics and Intelligent Systems Refresh		2.9
Non-Recurrent	CRM Replacement & Data Consolidation	Implementation of a SAAS replacement system.	9.4
	Meter Data Insights System Replacement		1.7
	Customer Portals Consolidation		9.7
	Website Replacement		2.1
	Click Replacement		14.3
	Enterprise Data Warehouse Replacement & Consolidation		1.8
	SAP Small Module Lifecycle Management & Optimisation	Implementation or changes to SAAS Systems.	1.0
	Customer Program: Personalised On Demand Services		7.4
	Assets & Work Phase 3 (Asset Management Transformation Program)		10.1
	Total		**74.8**

8.2 IT opex step changes and substitutions

The total proposed IT opex step changes and substitutions is $81.3 million (Table 14). The largest changes are related to the shifting nature of the Cyber security activity – shifting towards more operational and process-based activity and using SAAS systems. This results in a predominantly opex expenditure for cyber

related changes. Hence, we are proposing $42.1 million in opex for the Cyber Security Uplift to continue to maintain a secure reliable network and a $15.3 million capex-opex trade-off for the Recurrent Cyber Refresh activity. Other proposed changes are:

- A capex-opex trade-off associated with the ongoing migration of IT infrastructure to the Cloud and capacity for Cloud services ($8.8 million).
- An increase in the recurrent IT opex driven by the increase in the number of staff to enable the Network Assets Uplift ($10.9 million).
- An increase in the recurrent IT associated with the accelerated smart meter rollout for the storage, consumption and management of the additional data ($4.2 million).

Table 14: Proposed IT Opex step-changes and substitutions ($million, June $2022)

Step Change Driver	Business Case	Business Case & Description	2025-30 Funding Request
Regulatory Obligation	Cyber Security Uplift	Mitigating the priority cyber risks to our network and business over the 2025-30 RCP.	42.1
	Legacy Metering Transition – Towards 2030	IT costs associated with the accelerated rollout of smart meters.	4.2
Capex-Opex Trade Off	IT Infrastructure Refresh	Increased opex for existing systems that will be moved from physical datacentres to the Cloud.	8.8
	Cyber Security Refresh	Moving recurrent Cyber to opex, reflecting the shift to an operationalised nature of the capability and the SAAS nature of systems.	15.3
Major External Factor	Network Asset Uplift	Enabling an increased number of resources to deliver the network asset repex, augex and DER uplifts.	10.9
	Total		**81.3**

9. Customer Engagement and Impacts

As part of the SA Power Networks customer engagement process, we gathered information from customers relevant to the IT expenditure and then engaged directly with customers on key components of our proposal.

9.1 Broad and Diverse Engagement

The 'broad and diverse' market research and focus group engagement was undertaken to understand customer themes, priorities and issues. During this research customers raised a number of comments (nearly 200) with IT related components. The key IT themes arising from these comments were:

- Ensure a safe and reliable grid through increased cyber security, as the grid becomes 'smarter', more connected and as increased electrification makes consumers lives more dependent on it.
- Making our digital customer facing capabilities easy to use, providing the right level of information for the services. In general, the research found, that the more customers dealt with us the less they liked dealing with us. This was particularly the case for those customers (eg. electricians) who interacted regularly through our online portals.
- Providing data, information and digital tools to help customers manage their energy and costs.
- Increasing the use of automation to drive efficiency and keep a lid on costs.
- Increasing the use of data to drive decision-making, automation and efficiency.
- Adopting / leveraging digital technologies from other industries (eg. Uber) to improve digital capabilities.

We fed these themes into the IT proposal for the next stages of the customer engagement.

9.2 Focussed Conversations & People's Panel

The proposed IT expenditure was presented as part of the Focussed Conversations and People's Panel processes. Our approach discussed the total IT costs (capex and opex) contextualised within the overall 'bill impact' of the proposed expenditure.
Consistent with the overall Customer Engagement Approach we categorised IT expenditure into three scenarios – "basic (ie. recurrent)", "maintain (large upgrades & replacements + compliance)" and "new value", which were also consistent with AER ICT expenditure categories as highlighted in Table 15 below. The approach for IT was to seek detailed customer input on "new compliance" and "new value" related proposals, while presenting the "basic" and "maintain: large upgrades & replacements" as 'for information'. The exception to this was the Customer Program related large upgrades & replacements which were presented and discussed at a high level during the Focussed Conversations and People's Panel sessions related to 'Customer Experience and Interaction' initiatives.

9.3 Draft Plan

In the July 2023 SA Power Networks' Draft Proposal, we played back how we have given effect to Customer Panel recommendations and to confirm that those recommendations remain valid given continued cost of living pressures and to obtain further input to refine our Regulatory Proposal. Seven of the nineteen submissions to the Draft Proposal mentioned components of the IT expenditure, most of them in support of that specific component. Submissions to the Draft Plan did not comment on the overall IT expenditure. The Department of Energy & Mining did comment that the IT Non-Recurrent capital expenditure needed to be economically efficient and deliver long lasting productivity improvements. Certainly, in our business case we have selected the most economically effective option, with the business case classified based on the AER expenditure objective.

Table 15: IT engagement approach by expenditure scenario and category

Engagement Scenarios	AER ICT Categories: Subcategories	Focussed Conversations Engagement Approach	People's Panel Engagement Approach
Basic	Recurrent: Maintain existing services	For Information: Presented a detailed breakdown, including total cost and bill impacts for the proposed IT business cases and expenditure, to the SA Power Networks Consumer Advisory Board (CAB) at an IT Focussed Conversation	For Information: Presented as a component of the overall bill impact discussion
Maintain	Non-Recurrent: Maintain existing services - Large upgrades & replacements	For Information: Presented a detailed breakdown, including total cost and bill impacts for all proposed IT business cases and expenditure, to the SA Power Networks Consumer Advisory Board (CAB) at an IT Focussed Conversation	For Information: Presented as a component of the overall bill impact discussion
		Customer Program Replacement Business Cases: Presented and discussed during the Focussed Conversations regarding 'Customer Experience and Interaction'.	For Information: Presented in summary and feedback received.
	Non-Recurrent: Meet new or altered compliance requirements.[19]	Cyber Security Uplift: Options discussed in detail during the CAB IT Focussed Conversation.	Cyber Security Uplift: Options discussed in detail.
New Value	Non-Recurrent: Enable new or expanded capability	Customer Program: New Self Service Options presented and discussed during the 'Customer Experience and Interaction' Focussed Conversation.	Customer Program: New Self Service. Options presented and discussed in detail.
		Asset Management Transformation Program: Options presented and discussed during the Focussed Conversation regarding 'Managing a Reliable, Resilient and Safe Network'	Asset Management Transformation Program: Options presented and discussed in detail.

9.4 The Impact of Customer Engagement on the IT Proposal

9.4.1 Cyber Security Uplift Business Case

Increasing cyber security capability was a key issue for customers during the 'Broad and Diverse' workshops, being the most common technology related item that was spontaneously mentioned, indicating that it is a concern to many.

[19] *The Legacy Metering Transition (Smart Meter Accelerated Rollout) and ESB AEMO roadmap initiatives were not discussed because they emerged since the workshops.*

Focussed Conversation Outcome

The scenarios presented at the IT Focussed Conversation with the CAB were as follows:

1. 'Do nothing' – which would see cyber threats increasing significantly over time.
2. 'Achieve SP-3' – complying with AESCSF Security Profile 3 (SP-3) that we anticipated could become a legislative requirement by the end of the 2025-30 RCP (SP-1 is the current legislated requirement).
3. 'Go beyond SP-3', expecting that the cyber threat landscape and risk will evolve significantly over the next 7 years.

While there was a split vote (scenarios 2 vs. 3) the Focussed Conversation ultimately supported scenario 2, as it was perceived to be the minimum to achieve SP 3 compliance, but also to contain costs.

Peoples Panel Outcome

The same scenarios were presented to the People's Panel. The People's Panel did not agree with the recommendation of the Focused Conversation as it considered that the level of investment was insufficient to adequately protect infrastructure and support the level of services that customers will expect over 2025-30. The People's Panel instead recommended that SA Power Networks invest in a level of cyber security maturity that exceeds SP-3, on the basis that in adequate spending on cyber security for the electricity network could be catastrophic and as a community they were unable to accept that risk.

Draft Plan Outcome

The Draft Plan proposed Scenario 3 as the preferred option in line with the Peoples Panel recommendations. Five submissions specifically mentioned the cyber proposal. Four submissions were supportive of the proposal including one who suggested it did not actually go far enough due to the "rate of change…has changed from linear to logarithmic"[20]. One submission (**SACOSS**)[21] indicated that SA Power Networks should not look to exceed the legislated requirements and the Department of Energy and Mining expected the business case to be prudent and efficient[22]. The People's Panel reiterated their initial recommendation for the highest level of cyber funding.

Impact on the Regulatory Submission

In reviewing the customer feedback, and with a focus on affordability, the preferred option provides strong justification for the risk prioritised outcomes we need to deliver in the 2025-30 RCP and now does not include any activities that are required to achieve compliance but do not substantially address key risks. The preferred option is now $3.8 million less than that proposed in the Draft Plan. This addresses the clear need from customers for us to substantially improve our cyber risk posture in the 2025-30 RCP in a risk focused and cost-efficient manner.

9.4.2 The Customer Program

Customer experience accounted for 24% of all comments during the 'Broad and Diverse' workshops, emphasising the need for quality, reliable communication and easy to use digital tools to support customer

[20] *Individual Submission: Mount Barker Workshop Participant on SA Power Networks' 2025-30 Draft Regulatory Proposal, August 2023 https://www.talkingpower.com.au/draft-proposal.*
[21] *SACOSS, South Australian Council of Social Services, Submission on SA Power Networks' 2025-30 Draft Regulatory Proposal, September 2023.*
[22] *DEM, South Australian Department of Energy and Mining, Submission on SA Power Networks' 2025-30 Draft Regulatory Proposal, October 2023.*

services. The research also indicated a clear gap between expectations and reality that needed to be addressed.

Focussed Conversation Outcome

The scenarios presented at the 'Customer Experience and Interaction' Focussed Conversation with customer representatives were as follows:

1. 'Basic self-service (as is)' – resulting in degradation of services and increased risk over time.
2. 'Portal and data consolidation' (all of the replacement projects in the Customer Technology Program) creating secure systems that are fit for purpose and able to cope with increased workload during the energy transition.
3. 'Digital customer experience uplift' delivering improvements in self-service and proactive communications – reflecting 'new value' for customers.

Following discussions, all participants unanimously supported scenario 2 with majority support (66%) also for scenario 3.

Peoples Panel Outcome

Given this strong support from the Focussed Conversation, the scenarios were presented to the People's Panel but with the primary focus of discussion being on the 'new value' components of the expenditure. The People's Panel were unable to reach consensus on the proposed quantum of 'new value' expenditure, the positive vote falling just short of the People's Panel self-determined requirement of 80% to achieve 'consensus' (73% voted for the proposed New Value initiatives). In general, while residential customers could see the value, business customers were more reticent to pay full price.

Draft Plan Outcome

In response to the lack of total consensus from the People's Panel, we therefore proposed a more modest expenditure and scope, less than half of the initial 'new value' proposal (a $10 million reduction), in the 'New Self Service Business Case' in the Draft Plan.
The majority of customers who provided feedback on the Draft Plan voiced their approval of the investments and the People's Panel endorsed the reduced 'new value' expenditure proposal. One energy consumer advocate, who supported the scaled down plan, noted that it would help address the "common frustrations expressed" during the Broad and Diverse Workshops and the Focussed Conversations regarding the quality of the current systems and communications, as well as more adequately address accessibility standards.[23]

Willingness to Pay Survey

As part of the engagement program we also surveyed 1250 South Australian households in a Willingness to Pay survey across various components of the SA Power Networks proposal. The results indicated that South Australian households, on average, are willing to pay for new digital self-services outlined in the New Self Service business case, as the current 'New Self Services' proposals bill impact is significantly less than the indicated willingness to pay.

Impact on the Regulatory Submission

As a result of the strong positive response to this proposed Customer Program, we are proposing the reduced program for the Initial Submission as well –We have also substantially augmented the benefits analysis – identifying the clear long term customer benefits of this expenditure. Overall, these system replacements

[23] *Energy Customer Advocate. Submission on SA Power Networks' 2025-30 Draft Regulatory Proposal, Sept 2023.*

and the new self-service capability (referred to as "Personalised on Demand Services") provide the basis for cost effective and reliable customer interactions and communications going forward.

9.4.3 Assets & Work: Asset Management Transformation Program

Using technology to drive efficiency and keep a lid out costs, as well as service reliability and safety were some of the other main themes identified during the Broad and Diverse workshops.

Focussed Conversation Outcome

The management of reliability and bushfire safety though network asset replacement were key topics for our consumer engagement program. We engaged on the identified need by outlining the:

1. improvements we have made in managing these outcomes by investing in our Assets & Work program to date; and
2. the anticipated benefit of ongoing investment in our Asset Management systems.

The scenarios presented at the 'Managing a Reliable, Resilient and Safe Network' Focussed Conversation with customer representatives were as follows:

3. 'Don't Continue' – a counterfactual where we choose to not continue investment in our asset management systems through an A & W program, with no further benefits;
4. 'Continue' – a scenario where we continue to invest in the A & W program, providing an efficiency gain in Network investment required to manage the reliability and safety of our network.

While our customers and stakeholders were consistently mindful of energy affordability concerns, the Focused Conversations arrived at a clear consensus recommendation:

- stakeholders felt that SA Power Networks has been behind other industry sectors in adopting IT solutions to better manage the business over the last 5-10 years; and
- there was support for any program if the trade-offs / benefits from the IT investment can demonstrate reduced expenditure over time and improved efficiencies.

Peoples Panel Outcome

Given this strong support from the Focussed Conversation, the same scenarios were presented to the People's Panel. The People's Panel agreed with the Focussed Conversation and recommended that SA Power Networks continue to invest in the A&W program.

Draft Plan Outcome

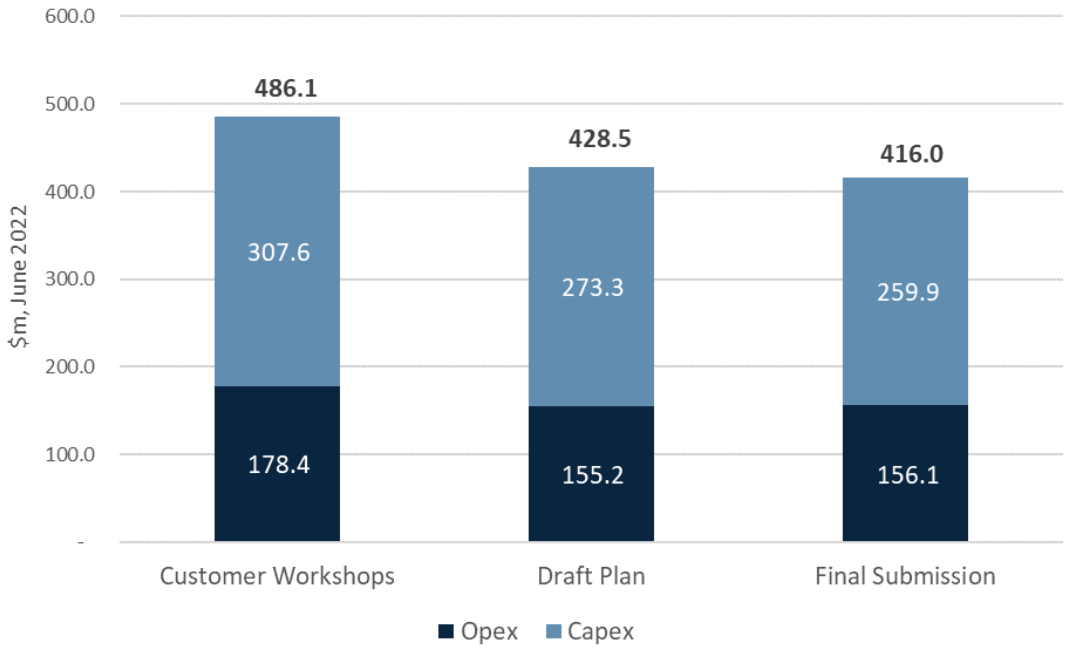
SA Power Networks proposed the same program in the Draft Plan. The People's Panel reaffirmed their recommendations, and the Small Business Commissioner for South Australia commended the proposed A&W improvements in works scheduling in reducing the impact of outages on business.[24]

[24] *Small Business Commissioner of SA, Submission on SA Power Networks' 2025-30 Draft Regulatory Proposal, Sept 2023.*

9.5 Summary of Changes

Figure 15 shows the reduction in IT proposed expenditure over the key stages of the submission development. The impact of customer feedback, the refinement of our portfolio and looking for additional reductions in our submission were the main drivers reducing the costs from one stage to the next. Overall the proposal has dropped by 14.4% or approximately $70 million since the start of the customer engagement process.

Figure 15 : Refining the IT Proposal including the impact of customer feedback



Appendix A: Total IT Expenditure 2015-2030

Table 16: Total IT Expenditure (Actuals, Forecast & Proposed) by year and expenditure category 2015-2025

Expenditure Category	2015-20 (Actuals)					2020-25 (Actuals and Forecast)					2025-30 (Proposed)					
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	Total 2025-30
Base recurrent opex	**11.0**	**19.4**	**23.3**	**20.3**	**19.1**	**22.9**	**31.3**	**31.3**	**34.4**	**36.2**	**35.6**	**35.8**	**35.9**	**36.3**	**37.0**	**180.6**
Capex + New opex																
Recurrent	40.3	35.2	33.6	36.5	34.4	33.6	35.3	28.1	26.1	31.6	39.3	36.0	37.0	41.6	41.2	**195.1**
Replacements / Upgrades	1.4	4.1	5.1	16.4	35.4	43.5	19.7	21.6	7.6	9.0	19.4	24.0	29.6	26.7	21.5	**121.1**
Compliance	3.2	7.0	17.9	5.0	4.6	4.1	10.6	1.5	2.2	2.3	4.5	11.2	11.6	11.2	12.6	**50.9**
New or Expanded	3.3	15.2	13.0	12.5	7.9	6.5	11.0	7.4	5.4	8.6	6.6	9.5	9.9	9.6	13.3	**48.9**
Total Capex + New opex	**48.1**	**61.5**	**69.6**	**70.5**	**82.3**	**87.7**	**76.7**	**58.6**	**41.3**	**51.5**	**69.8**	**80.7**	**88.0**	**89.1**	**88.5**	**416.0**
TOTEX	**59.1**	**81.0**	**92.9**	**90.8**	**101.4**	**110.6**	**108.0**	**89.9**	**75.7**	**87.7**	**105.4**	**116.4**	**123.9**	**125.4**	**125.5**	**596.6**

Appendix B: Business Case Summaries

Recurrent IT Business Case Summaries

A brief summary of each recurrent business case is provided below.

Business Case		2025 – 30 Investment					
	Client Device Refresh	Capex	**$32.1m**	New Opex	-	Totex	**$32.1m**

This program delivers the recurrent refresh of Client Devices (laptops, PCs, mobile phones, tablets etc.) to mitigate risks from declining reliability and performance as these devices age, become unreliable, require increased maintenance and ultimately fail. Client devices provide critical services which underpin and enable all our customer service and business processes. For field staff, mobile devices also play a critical safety role.

The recommended investment of $32.1 million is 1.75% above investment levels over the last 5-year period. This change relates to a transition to portable devices due to hybrid working, an increase in the number of our client devices due to cyber security requirements and to avoid sharing devices, and a one-off purchase of new tablet docks in cars due to the discontinuation of our existing tablet models.

Business Case		2025 – 30 Investment					
	Cyber Security Refresh	Capex	-	New Opex	**$15.3m**	Totex	**$15.3m**

Cyber security is a fundamental necessity in the delivery of safe and reliable distribution services. The 2020-25 RCP has seen a significant escalation in threats to infrastructure globally. This recurrent investment in cyber security is required to ensure the IT and OT systems that provide services to our customers are reliable, available and trustworthy, and meet regulatory obligations.

During the 2020-25 RCP we are uplifting our Cyber capability to achieve close to achieve the maximum risk mitigation (based on an AER approved non-recurrent investment program). Maintaining this going forward requires a small increase to cater for the additional capability that has been added as a result of the 2020-25 non-recurrent cyber uplift program and the material increases in the risks and the resultant capabilities for many activities within the operations and digital identity areas. We also propose to undertake a capex to opex shift for this expenditure, reflecting the operationalising of the cyber capabilities; the use of SAAS as the predominant cyber tools; and the process-based nature of the cyber services.

Business Case		2025 – 30 Investment					
	Data, Analytics and Intelligent Systems Refresh	Capex	**$11.9m**	New Opex	**$2.9m**	Totex	**$14.8m**

This business case details the justification for the recurrent expenditure required to ensure that our enterprise data, analytics and intelligent systems and services are maintained and secure with the acceptable levels of risk. These systems have been significantly developed and expanded during the 2020-25 RCP due to the demand for quality, integrated data to drive evidence-based decision making across the whole of the organisation including improved network asset forecasting and planning; operationally managing the increasing CER penetration; and modelling and managing the energy transition.

To manage this expansion**,** we are proposing an uplift of $3.4 million and a base year adjustment of $2.9 million, reflecting the shift to SAAS based services for these applications.

Business Case	IT Applications Refresh	2025 – 30 Investment					
		Capex	**$62.8m**	New Opex	**$14.4m**	Totex	**$77.2m**

Our IT applications are an integrated portfolio of 80+ core IT applications and technology software platforms. These business-critical systems enable the effective management of our distribution network services, including asset management, planning and design, customer services, life-support customers, works management and scheduling and corporate services (such as finance, payroll and procurement).

Our applications portfolio enables all aspects of our business.

A number of significant non-recurrent programs were successfully undertaken during the 2020-25 RCP to replace or upgrade and consolidate our systems (eg. Billing Replacement, SAP Upgrade, GIS Consolidation). Our proposed investment of $77.2 million reflects the need to maintain the value in our new systems and maintain functionality and security standards in an increasingly dynamic energy services environment. We also need to refresh an increased number of mobile apps (used for collecting network related data to facilitate improved asset decision-making), as well as manage increased compliance requirements such as the Australia Tax Office's Single Touch Payroll, that came into force during the RCP.

We are proposing a $14.4 million opex base year adjustment reflecting the gradual migration of our applications to SAAS based services as small upgrades and/or replacements occur.

Business Case	IT Infrastructure Refresh	2025 – 30 Investment					
		Capex	**$34.1m**	New Opex	**$8.8m**	Totex	**$42.9m**

Reliable IT infrastructure underpins the delivery of all IT services which are, in turn, critical to the effective operation and maintenance of the electricity network, management of network outages, and provision of distribution services to customers. IT infrastructure includes hardware for servers, storage, IT networking equipment such as switches and routers, database and desktop presentation software systems and business continuity capability. A failure or outage of IT services has a direct impact on our ability to operate and maintain our network and deliver distribution services to customers.

In the 2025-30 RCP we will continue our journey to cloud based services, making prudent, opportunistic, system by system decisions when they are required to be upgraded or replaced. The use of IT systems and data collection has grown significantly in response to the strategic requirements to manage a more dynamic grid and enable more data driven decision making. This in turn has increased demand for storage and computing power. We will continue to replace hardware in our data centres that has reached end of life where it is needed to support systems which are not cloud-hosted. The total capex for 2025-30 will be reduced from the current period, because the systems in which we forecast capacity growth are now cloud-based and instead will require an ongoing uplift in our opex.

Our most efficient option proposes $34.1 million of capex and $8.8 million of new recurrent opex.

Business Case	**Network Uplift Resourcing – Ongoing IT**	2025 – 30 Proposed Investment					
		Capex	**$1.9m**	New Opex	**$10.9m**	Totex	**$12.7m**
This increase in the IT costs is due to our planned uplifts in network asset replacement, augmentation, CER integration and connections in the 2025-30 RCP. These costs are associated with bringing on significant numbers of additional field and support staff. The costs include additional field devices (laptops, tables, phones), licencing for access to applications and associated costs. The details and justification for this uplift are provided in the document 'Resourcing Plan for Delivering the Network Program'[25].							

[25] 5.2.5 - Resourcing Plan for Delivering the Network Program.

Large Upgrades & Replacements Business Case Summaries

Customer Replacement Program

Business Case	**CRM Replacement & Data Consolidation**	2025 – 30 Proposed Investment					
		Capex	**$3.1m**	New Opex	**$9.4m**	Totex	**$12.5m**

The existing customer service solution, most commonly referred to as Customer Relationship Management (**CRM**) software, is heading towards end of life and needs to be replaced. In parallel multiple customer databases, which are creating a cyber security risk and administrative overhead, need to be consolidated onto the new customer service platform, which would align the underlying architecture to modern best practice standards.

Three options were explored, with the Business Case recommending a replacement of the CRM and data models in the 2025-2030 period in order to:

- Manage risk related to ongoing provision of CRM software. The current CRM is deemed end of life, based on the vendor's solution roadmap, and will lose support in the next few years, so we must manage the risk for maintaining our existing services.
- Consolidate the customer data repositories to manage cyber security risk and deliver improved data to customer service teams required to resolve customer enquiries more efficiently.
- Enable the foundational capability required to support other Customer Technology business cases and the associated $99.1 million of benefits to be delivered.

There is an additional $4.4 million in new recurrent opex increases. However, we will seek to offset this with benefits from elsewhere in the portfolio and hence we are not asking for a step change.

Benefits (2025-35)	Risk Avoidance	**$-**	Cost Avoidance	**$19.4m**	Cost Reduction	**$3.7m**	Customer Time	**$0.7m**
							Total	**$23.8m**

Business Case	**Customer Notification System Replacement**	2025 – 30 Proposed Investment					
		Capex	**$10.2m**	New Opex	-	Totex	**$10.2m**

This proposal replaces the legacy customer notification solution (**CNS**), which is used for managing and communicating planned work interruption notices to all customers, including life support customers. The current solution has been deemed not fit for purpose based on its legacy solution architecture and poses a high risk of life support customer notification breach.

The business case recommends a replacement of the CNS solution to:

- Maintain our existing ability to comply to regulatory obligations related to planned interruption notifications and reduces the risk of harm to a life support customer as a result of failing to notify them of a planned power outage
- Provides all customers with improved notifications, in accordance with their preferences
- Avoids the future internal costs through reduction of manual overheads and reduced/eliminated notification breach events.

There is an additional $0.4 million in new recurrent opex increases. However, we will seek to offset this with benefits from elsewhere in the portfolio and hence we are not asking for a step change.

Benefits (2025-35)	Risk Avoidance	**$3.7m**	Cost Avoidance	**$18.8m**	Cost Reduction	**$0.1m**	Customer Time	**$0.03m**
							Total	**$22.6m**

Business Case	Meter Data Insights System Replacement	2025 – 30 Proposed Investment					
		Capex	**$0.4m**	New Opex	**$1.7m**	Totex	**$2.1m**

Replace the Meter Data Insights (**MDI**) solution, which is a business-critical system supporting customer service delivery, reporting and analytics to our business customers. The solution is currently unable to meet business requirements for ongoing customer requests for large quantities of metering data. In addition, it results in inefficient processes, overheads related to poor system capabilities, out of system processing and lack of trust in system results.

Moving forward in the 2025-30 period, the solution is unable to meet the needs for storing and processing an increasing quantity of metering data and more diverse tariff structures and needs to be replaced to:

- Enable quicker and more efficient response to customer requests for large quantities of metering data.
- Improve our capabilities to support customer investment decision making including options analysis capabilities e.g., tariff options or impacts to them due to rate or tariff structure changes.
- Improve capabilities to proactively manage agreed capacities, with our customers providing increased insights into asset utilisation for asset management planning purposes.
- Deliver a meter data reporting and analytical capability which can process and analyse increasing volumes of data, year on year, due to 5-minute interval data and a greater number of smart meters.

Benefits (2025-35)	Risk Avoidance	**$-**	Cost Avoidance	**$5.6m**	Cost Reduction	**$-**	Customer Time	**$1.1m**
							Total	**$6.7m**

Business Case	**Customer Portals Consolidation**	2025 – 30 Proposed Investment					
		Capex	**$2.7m**	New Opex	**$9.7m**	Totex	**$12.5m**

Replace various web-based customer-facing portals with a modern more secure, consolidated solution. The key underlying portal platform is end of life in 2028 and will no longer be supported by the vendor. Multiple portal platform solutions currently exist that are built on inconsistent architecture standards and require multiple entry points, creating issues for customers as well as cyber security risk.

A replaced portal solution will result in:

- Maintenance of existing service levels and reduced risk of solution deemed end of life in 2028
- Improved access to online services, including ability to report enquiries and faults quicker, and more meaningful status updates based on customers communications preferences.
- Improved customer digital experience by providing a unified, consistent and easy to use interface.
- Decrease the calls to the contact centre through increasing the uptake of self-service portals through easy to use and access services.
- Provide greater levels of customer data protection and decrease the operational cost and complexity of managing the existing portals.

There is an additional $1.2 million in new recurrent opex increases. However, we will seek to offset this with benefits from elsewhere in the portfolio and hence we are not asking for a step change.

Benefits (2025-35)	Risk Avoidance	**$2.9m**	Cost Avoidance	**$9.5m**	Cost Reduction	**$0.6m**	Customer Time	**$3.2m**
							Total	**$16.2m**

Business Case	Website Replacement	2025 – 30 Proposed Investment					
		Capex	**$0.3m**	New Opex	**$2.1m**	Totex	**$2.5m**

Replace the legacy website content management software, which is used for managing and publishing website content on the external www.sapowernetworks.com.au website. The current legacy website content management software is increasingly costly to maintain and operate e.g., no automatic scale-up in periods of peak customer demand and scale-down in periods of low customer demand. The website does not meet current business requirements for management of website content and also does not meet accessibility standards for customers relying on assistive technologies.

A new website will provide a lower cost of delivering website content services, efficiency gains and meet customer expectations for accessible digital services.

There is an additional $0.3 million in new recurrent opex increases. However, we will seek to offset this with benefits from elsewhere in the portfolio and hence we are not asking for a step change.

Benefits (2025-35)	Risk Avoidance	**$-**	Cost Avoidance	**$6.0m**	Cost Reduction	**$1.2m**	Customer Time	**$1.2m**
							Total	**$8.4m**

Other IT System Upgrades and Replacements

Business Case	**Click Replacement**	2025 – 30 Investment					
		Capex	**$3.9m**	New Opex	**$14.3m**	Totex	**$18.2m**

Click Field Service Edge (**FSE**) is our primary system for managing our field crews, including field work planning, scheduling and despatch; providing safety and map information for crews; capturing job close out information, asset updates and crew timesheeting; and providing the outage and work updates to customers. As a result of being acquired by a competitor, Click is no longer being developed and will be switched off in the near future. Hence, as part of this business case, we have explored a number of options associated with replacing Click.

This business case recommends the timely and prudent replacement of Click during the 2025-30 period with a solution that provides the equivalent services. Click FSE is a SAAS product and the likely replacements are as well. Therefore, the majority of the expenditure will be non-recurrent opex. In addition, these products have an increased subscription cost compared to the current Click product, resulting in an expected $0.6 million increase in recurrent opex. However, we will seek to offset this increase using benefits from elsewhere in the IT portfolio.

Benefits (2025-35)	Risk Avoidance	**$19.9m**	Cost Avoidance	**$-**	Cost Reduction	**$-**	Total	**$19.9m**

Business Case	**Enterprise Data Warehouse Replacement & Consolidation**	2025 – 30 Proposed Investment					
		Capex	**$14.2m**	New Opex	**$1.8m**	Totex	**$16.1m**

Our legacy data warehouse was unable to meet the requirements to manage the diversity of data sources created by the energy transition and we have created a modern Enterprise Data Platform (**EDP**) in Microsoft Azure. There is now a need to consolidate all remaining data sets from the legacy data warehouse into the EDP and decommission it when extended support ends in 2030, aiming to simplify our technology landscape to keep costs down. Under a business-as-usual approach of continuing with the current system, service risk increases when we no longer have access to security patching for our legacy system (2030). We would then need to seek additional third-party support (at extra cost) to support the software. Further we would not gain the efficiencies from consolidating onto a single data platform and trusted source of truth.

The recommended option is to consolidate our legacy data warehouse onto the EDP in 2025-30. This will maintain our current levels of services and risk and drive the most cost-effective approach to our data management long term – particularly important given the increasingly fundamental role of data in network and customer decisions.

There is an additional $1.3 million in new recurrent opex increases. However, we will seek to offset this with benefits from elsewhere in the portfolio and hence we are not asking for a step change.

Benefits (2025-35)	Risk Avoidance	**$8.3m**	Cost Avoidance	**$11.9m**	Cost Reduction	**$4.2m**	Total	**$24.4m**

Business Case	**Integration Platform Replacement**	2025 – 30 Proposed Investment					
		Capex	**$13.0m**	New Opex	**-**	Totex	**$13.0m**

Our core integration platform handles millions of customer, network and business related transactions every year, in real time. Support for the current system ends provisionally in 2027 but then completely by 2030, hence there is a need to replace the current business critical system in the 2025-30 RCP. Not replacing by 2030 exposes us to significant performance, market and cyber risk – given this the core system handling all of our national market transactions, as well as significantly increasing the cost of ongoing support for trying to keep it going on our own. The preferred option replaces the current one with an equivalent capability.

Benefits (2025-35)	Risk Avoidance	**$-**	Cost Avoidance	**$27.4m**	Cost Reduction	**$-**	Total	**$27.4m**

Business Case	**Service Order Module Replacement**	2025 – 30 Proposed Investment					
		Capex	**$20.7m**	New Opex	**-**	Totex	**$20.7m**

The Service Order Module is responsible for managing all customer requests including new connections; disconnections; reconnections; shock reporting; Dial-before-you-dig; Quality of Supply reporting; and customer specific projects – amongst other services. The supplier has already extended support once but has now announced it will be switched off in 2030. Not replacing it means we would incur very significant costs from reverting to more manual processes for many thousands of customer requests, violate our compliance with national market requirements and put customer safety at risk. The recommended option replaces the current module with the most cost-effective equivalent capability by 2030.

Business Case	**SAP Small Module Lifecycle Management & Optimisation**	2025 – 30 Proposed Investment					
		Capex	**$12.3m**	New Opex	**$1.0m**	Totex	**$13.4m**

Replacing five small SAP modules that are coming to the end of their support lives in the 2025-30 RCP, as well as optimizing our SAP Payroll module to meet compliance requirements more cost efficiently. The recommended option replaces the modules at the end of their lives, managing our risk to services, and optimises Payroll to keep the long-term costs for customers down.

There is an additional recurrent opex of $1.7 million which we will offset against the cost reductions and not claimed as a step change.

Benefits (2025-35)	Risk Avoidance	**$-**	Cost Avoidance	**$2.5m**	Cost Reduction	**$2.8m**	Total	**$5.3m**

New Compliance Business Case Summaries

Business Case	**Cyber Security Uplift**	2025 – 30 Proposed Investment					
		Capex	**$2.6m**	New Opex	**$42.1m**	Totex	**$44.7m**

During the 2020-25 RCP our cyber threats increased and it will continue to grow into the 2025-30 RCP, and grow faster than our current legislated requirements allow for. As such we have proposed a comprehensive program of risk prioritised changes to continue to grow our capability to defend against cyber threats and manage our recovery from them. Cyber risk issues were front of mind for customers during our engagement processes.

Delivery of a slightly higher proposed program of work ($47.5 million) was strongly supported by our customer 'People's Panel'. However**,** being cognisant of pressure on customer cost of living issues, we removed a small component of activity that was only about achieving compliance with AESCSF Security Profile 3 (SP-3) and instead focus only on activity that reduces our priority cyber risks. We estimate this will enable us to avoid ongoing costs and manage an annual quantum of monetised risk that will increase to an average of $38.8 million per annum in the 2030-35 RCP.

Benefits (2025-35)	Risk Avoidance	**$201.2m**	Cost Avoidance	**$24.4m**	Cost Reduction	**$-**	Total	**$225.7m**

Business Case	**Legacy Metering Transition – Towards 2030**	2025 – 30 Proposed Investment					
		Capex	-	New Opex	**$4.2m**	Totex	**$4.2m**

The AEMC[26] has proposed an accelerated smart meter rollout to be completed by 2030**,** to enable greater access to good quality power related information to assist customer and network decision-making. This proposal is expected to become a compliance obligation for SA Power Networks during 2024. We will be required to store and secure more data associated with smart meters, which is used for network billing and servicing customer queries. Because the billing and customer analytics systems are now cloud based, the costs are opex. There are also other systems changes required to enable a larger number of smart meters. This is an initial cost estimate based on the expected growth rate in smart meters as well expected systems changes that need to be made during the RCP to accommodate the accelerated growth. We expect to develop a final cost estimate for the Revised Regulatory Submission as the specific details become clearer during 2024.

[26] *AEMC Metering Review: https://www.aemc.gov.au/sites/default/files/2023-08/emo0040_-_metering_review_-_final_report.pdf.*

Business Case	**ESB AEMO Post 2025 Roadmap Initiatives**	2025 – 30 Proposed Investment					
		Capex	**$2.0m**	New Opex	-	Totex	**$2.0m**

The Energy Security Board (ESB) has proposed a suite of reforms to meet long-term energy transition needs and has established a program of work to deliver on those reforms. AEMO has been tasked with delivering on energy market changes and is currently working through the process of prioritising changes in concert with market participants. Once the dates are finalised (which we expect will happen during 2024), these requirements will be passed to us as market compliance changes. We have identified three initiatives we expect will have a material cost impact during 2025-30. These are changes related to the implementation of an Industry Data Exchange; energy market Identity and Access Management to improve security; and Portal Consolidation, to improve security and market costs. These proposed initiatives are currently out for review and the timing is yet to be fixed. Our initial estimates indicate the total cost for these changes (should they all be required) is $21 million. However, a significant proportion of that may well be required in the following RCP (2030-35). The potential 2025-30 cost is estimated in the range of $2 million to $12 million. We expect to develop a final cost estimate for the Revised Regulatory Submission as the specific details become clearer during 2024.

Benefits (2025-35)	Risk Avoidance	**$TBD**	Cost Avoidance	**$TBD**	Cost Reduction	**$TBD**	Total	**$TBD**

New or Expanded Capability Business Case Summaries

Business Case	**Customer Technology Program: Personalised on Demand Services**	2025 – 30 Proposed Investment					
		Capex	**$1.2m**	New Opex	**$7.4m**	Totex	**$8.6m**

This project aims to develop new customer self service capabilities which deliver improved response times to key customer interactions and enquiries. At present there are a number of inefficient processes related to key high volume customer service requests, such as customer order status and energy transition enquiries, which can't be sustained based on projected increases in customer services interactions. The forecast increase is based on observed historic growth as well as the industry transition and household electrification.

This business case proposes the management of customer service costs through new digital services and channels, avoiding internal inefficiencies as well as the cost of proactive notifications delivered via traditional channels.

Benefits (2025-35)	Risk Avoidance	**$-**	Cost Avoidance	**$13.5m**	Cost Reduction	**$3.5m**	Customer Time	**$4.4m**
							Total	**$21.4m**

Business Case	**Assets & Work Phase 3 (Asset Management Transformation Program)**	2025 – 30 Proposed Investment					
		Capex	**$30.2m**	New Opex	**$10.1m**	Totex	**$40.3m**

SA Power Networks has been investing in improving our asset management capability and systems through a long-term multi–RCP Assets and Work Program (**A&W**). Investment in our asset management systems via the A&W program to date has underpinned our ability to continue to deliver good service outcomes to customers despite a growing number of assets reaching the end of their economic life. Over the years, this program has significantly increased our ability to understand our network (through efficient data collection and analytics); understand the risk our assets pose to customer service outcomes; develop an approach to the economic valuation of network investment (through monetising the effects on customer service); commenced developing a value verses cost approach to network investment; and improved our planning around where best to efficiently invest network replacement expenditure.

In 2023 we comprehensively reassessed our asset management practices and identified key areas for improvement. We have encapsulated this work in an Asset Management Transformation Program with an objective of delivering approximately $90.0 million in customer network benefits over a 10-year period, for a cost of $40.3 million in the 2025-30 RCP. We have reduced our network assets proposals by $39.5 million on the assumption that this program is allowed. This program will also enable us to avoid an estimated $8.0 million in additional costs associated with running the Network uplift program. Should the AMTP not go ahead, then we will need to seek the additional costs to execute the uplift.

Benefits	Risk Avoidance	**$-**	Cost Avoidance	**$-**	Cost Reduction	**$90.0m**	Total	**$90.0m**

Appendix C: Full Cost and Benefit Summary Table

		Costs					Opex Handling			10-year Benefits					
AER ICT Subcategory	**Business Case**	**2025-30 Capex**	2025-30 Non-Recurrent Opex	New Recurrent – Change Driven	New Recurrent - SAAS or Cloud Driven	Total 2025-30 Cost	Increase to be Offset by Portfolio Benefits	Proposed Step-Change Opex	Proposed Base Year Adjustment	Avoidance	Saving/ Reduction	Customer Time Saving	Risk Monetisation	**Total Benefits**	**2025-30 Funding Request**
Recurrent: Maintain existing services	Client Device Refresh	32.1				32.1									**32.1**
	Cyber Security Refresh			15.3		15.3		15.3							**15.3**
	Data, Analytics and Intelligent Systems Refresh	11.9			2.9	14.8			2.9				36.8	36.8	**14.8**
	IT Applications Refresh	62.8			14.4	77.2			14.4						**77.2**
	IT Infrastructure Refresh	34.1			8.8	42.9		8.8							**42.9**
	Network Uplift Resourcing – Ongoing IT	1.9		10.9		12.7		10.9							**12.7**
	Total IT Recurrent	**142.9**	**-**	**26.2**	**26.0**	**195.1**	**-**	**35.0**	**17.2**	**-**	**-**	**-**	**36.8**	**36.8**	**195.1**
Non-Recurrent: Maintain existing services - Large upgrades & replacements	**Customer Replacement Program**														
	CRM Replacement & Data Consolidation	3.1	9.4	4.4		16.9	4.4		9.4	19.4	3.7	0.7		23.8	**12.5**
	Customer Notification System Replacement	10.2		0.4		10.5	0.4			18.8	0.0	0.0	3.7	22.6	**10.2**

		Costs					Opex Handling			10-year Benefits					
AER ICT Subcategory	**Business Case**	**2025-30 Capex**	2025-30 Non-Recurrent Opex	New Recurrent – Change Driven	New Recurrent - SAAS or Cloud Driven	Total 2025-30 Cost	Increase to be Offset by Portfolio Benefits	Proposed Step-Change Opex	Proposed Base Year Adjustment	Avoidance	Saving/ Reduction	Customer Time Saving	Risk Monetisation	**Total Benefits**	**2025-30 Funding Request**
	Meter Data Insights System Replacement	0.4	1.7	0.1		2.3	0.1		1.7	5.6		1.1		6.7	**2.1**
	Customer Portals Consolidation	2.7	9.7	1.2		13.7	1.2		9.7	9.5	0.6	3.2	2.9	16.2	**12.5**
	Website Replacement	0.3	2.1	0.3		2.8	0.3		2.1	6.0	1.2	1.2		8.4	**2.5**
	Total Customer Program	**16.8**	**23.0**	**6.5**	**-**	**46.2**	**6.5**	**-**	**23.0**	**59.3**	**5.6**	**6.6**	**6.6**	**77.7**	**39.8**
	Other Systems														
	Click Replacement	3.9	14.3	0.6		18.8	0.6		14.3				19.9	19.9	18.2
	Enterprise Data Warehouse Replacement & consolidation	14.2	1.8	1.3		17.4	1.3		1.8	11.9	4.2		8.2	24.4	16.1
	Integration platform replacement	13.0				13.0				27.4				27.4	13.0
	SAP Small Module Lifecycle Management & Optimisation	12.3	1.0	1.7		15.1	1.7		1.0	2.5	2.8			5.3	13.4
	Service Order Module Replacement	20.7				20.7								-	20.7
	Total Other	**64.2**	**17.2**	**3.6**	**-**	**85.0**	**3.6**	**-**	**17.2**	**41.8**	**7.0**	**-**	**28.2**	**77.0**	**81.4**

		Costs					Opex Handling			10-year Benefits					
AER ICT Subcategory	Business Case	2025-30 Capex	2025-30 Non-Recurrent Opex	New Recurrent – Change Driven	New Recurrent - SAAS or Cloud Driven	Total 2025-30 Cost	Increase to be Offset by Portfolio Benefits	Proposed Step-Change Opex	Proposed Base Year Adjustment	Avoidance	Saving/ Reduction	Customer Time Saving	Risk Monetisation	Total Benefits	2025-30 Funding Request
	Total Large Upgrades & Replacement	**81.0**	**40.1**	**10.1**	**-**	**131.2**	**10.1**	**-**	**40.1**	**101.1**	**12.6**	**6.2**	**34.8**	**154.7**	**121.1**
Non-Recurrent: Meet new or altered compliance requirements	Cyber Security Uplift	2.6	26.2	15.9		44.7		42.1		24.5			201.2	225.7	44.7
	ESB AEMO Post 2025 Roadmap Initiatives	2.0				2.0									2.0
	Legacy Metering Transition – Towards 2030			4.2		4.2		4.2							4.2
	Total New Compliance	**4.6**	**26.2**	**20.2**	**-**	**50.9**	**-**	**46.3**	**-**	**24.5**	**-**	**-**	**201.2**	**225.7**	**50.9**
Non-Recurrent: Enable new or expanded capability	Customer: Personalised On Demand Services	1.2	7.4			8.6			7.4	13.5	3.5	4.4		**21.4**	8.6
	Assets & Work Phase 3 (Asset Management Transformation Program)	30.2	10.1			40.3			10.1		90.0			**90.0**	40.3
	Total New or Expanded Capability	**31.4**	**17.4**	**-**	**-**	**48.9**	**-**	**-**	**17.4**	**13.5**	**93.5**	**4.4**	**-**	**111.4**	**48.9**
	Total ICT Non-Recurrent	**117.1**	**83.7**	**30.3**	**-**	**231.1**	**10.1**	**46.3**	**57.6**	**139.1**	**106.1**	**10.6**	**236.0**	**491.8**	**220.9**
Total ICT		**259.9**	**83.7**	**56.5**	**26.0**	**426.2**	**10.1**	**81.3**	**74.8**	**139.1**	**106.1**	**10.6**	**272.8**	**528.6**	**416.0**