Program Overview – ICT Non-Recurrent Customer Technology Program

2025-30 Regulatory Proposal

Supporting document 5.12.27

January 2024

SA Power Networks

Empowering South Australia

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Glossary

Acronym / term	Definition
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
BAU	Business as usual
Capex	Capital expenditure
CER	Customer energy resources
CNS	Customer notification systems
CRM	Customer relationship management system
DXP	Digital experience platform
EV	Electrical Vehicles
ICT	Information and Communication Technology
IT	Information Technology
MDI	Meter data insights
NPV	Net present value
Opex	Operating expenditure
RCP	Regulatory control period

1. About this document

1.1 Purpose

This document provides the overview, rationale and program summary of the proposed Customer Technology Program expenditure for the 2025-30 regulatory control period (**RCP**)[1] and enables the SA Power Networks' 2025-30 Regulatory Proposal. This program justification consists of six interrelated business cases that are submitted with this summary.

1.2 Australian Energy Regulator Expenditure categories

- Non-network Information and Communication Technology (**ICT**) capex: non-recurrent – major replacements or upgrades
- Non-network ICT Operating expenditure (**opex**): base year adjustment – Software as a Service related

1.3 Related documents

Table 1: Related documents

Title	Author	Version / date
5.12.1 - IT Investment Plan 2025-30	SA Power Networks	Jan 2024
5.12.17 - Customer Program: Website replacement Business Case	SA Power Networks	Jan 2024
5.12.18 - Customer Program: Consolidate Customer Portals Business Case	SA Power Networks	Jan 2024
5.12.19 - Customer Program: Customer Notification System Replacement Business Case	SA Power Networks	Jan 2024
5.12.20 - Customer Program: Meter Data Insights System Replacement Business Case	SA Power Networks	Jan 2024
5.12.21 - Customer Program: CRM Replacement & Data Consolidation Business Case	SA Power Networks	Jan 2024
5.12.22 - Customer Program: Personalised on Demand Services Business Case	SA Power Networks	Jan 2024
IT Asset Management Plan	SA Power Networks	Jan 2024
5.12.23 - ICT Forecast Methodology & Business Case Structure - Methodology	SA Power Networks	Jan 2024

[1] *The Regulatory Control Period from 1 July 2025 until 30 June 2030.*

2. Executive summary

We rely on our customer service technologies[2] to efficiently deliver cost effective customer services to the South Australian community. In 2023 our customer technology played a pivotal role in our operations, enabling us to:

- **Manage extensive customer records:** Effectively oversee the records of 860,000 customers including 22,500 customers identified as life support customers
- **Handle high call volumes:** Respond to 300,000 phone calls related to a range of matters such as fault reporting and general enquiries
- **Facilitate timely communications:** Sending 8.3 million digital messages to our customers informing of power outages
- **Enable online engagement:** Provide information to 2 million unique visitors to our website seeking important information and online services.

However, looking ahead, we face a critical challenge as several of our core customer systems are approaching the end of their operational life between 2025- 2030. The aging 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, as illustrated in Table 2.

Table 2: Customer Technology - Level of Risk and Forecast Cost Increase

Customer Technology	Forecast cost increase[3]	Forecast risk level[4]
Customer Relationship Management (CRM)	$20 million	Extreme
Website	$6 million	High
Customer Notification System	$19 million	High
Customer Portals	$10 million	High
Meter Data Insights (**MDI**)	$6 million	High
Overall	**$61 million**	**High**

As we progress into the 2025-30 period, the increasing complexity in the energy sector, driven by the rising influence of customer energy resources will directly affect the demand for our customer services. We have witnessed a substantial surge in demand, with a considerable **276%** increase in customer interactions over the past five years,. This upward trajectory in demand poses a significant challenge, placing additional strain on our aging systems and threatening our capacity to provide cost-effective and compliant customer services.

Furthermore, we have identified a strong benefit in investing in new personalised on demand services capabilities, which is aligned with what customers have supported and consistently told us they value. This initiative will provide customers with a broader range of digital services and real time communications as they continue to navigate the energy transition. It will also decrease the burden on our traditional, higher cost-to-serve customer service interfaces such as telephone and email.

As a result, we are proposing a Customer Technology Program (comprised of six integrated business cases) encompassing:

[2] Customer service technologies encompass solutions used facilitate the provision of customer services and associated information, these include the following systems capabilities – CRM, customer facing portal, website software, analytical systems, and digital messaging.
[3] Cost increases have been modelled across a 10-year period 2025-2035 based on a do-nothing scenario.
[4] The SA Power Networks Risk Management Framework was used to assess risk levels, the detailed risk assessments are available within each business case.

- **Customer Technology Replacement Program:** five Information Technology (IT) upgrades/replacement business cases aimed to refresh core customer systems which are reaching end of life and/or are no longer fit for purpose, posing increased risk and cost to our current service levels.
- **Personalised on Demand Services:** one new/expanded capability business case targeting new digital services in line with what customers have told us they value.

The current state of technologies is characterised as legacy and disjointed, presenting inefficiencies in customer services, with some of the solutions having been implemented 20 years ago. The objective of the program is to de-risk, modernise and simplify ageing technologies, providing customers with a consolidated entry point, as illustrated in Figure 1. Core to the realisation of the future state is a Customer Relationship Management (CRM) capability. The overarching goal is to streamline customer interactions, improve accessibility and enable more efficient and automated processes, avoiding significant risk and future cost increases.

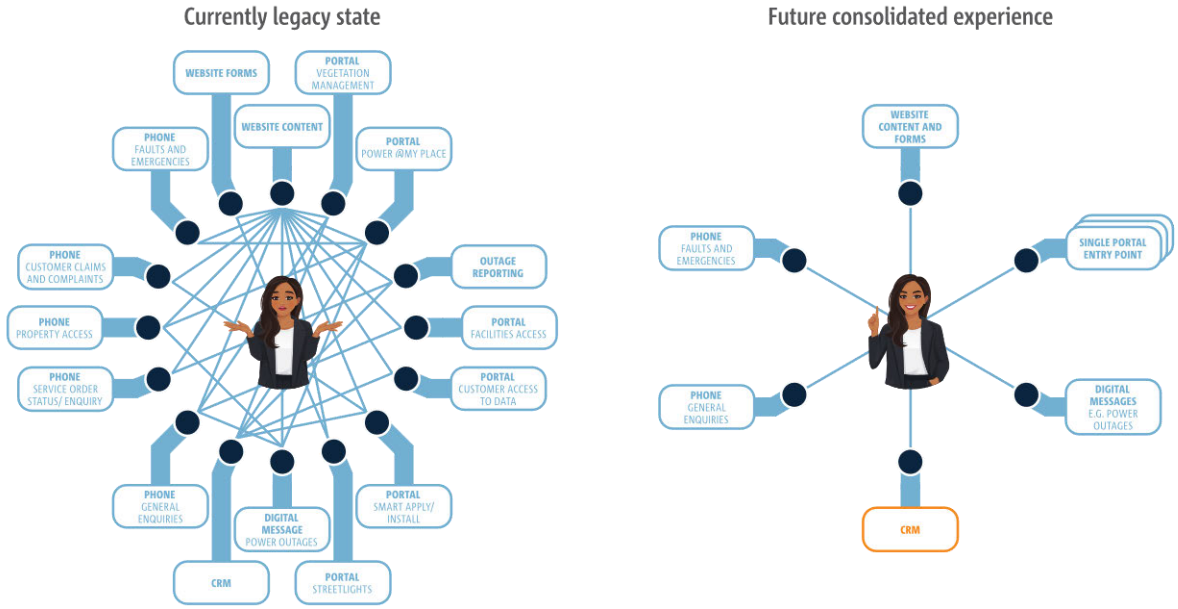

Figure 1: A representation of customer interfaces and services before and after legacy system replacement.

The program is consistent with the National Electricity Rules expenditure objectives. Customer experience, choice and empowerment, including access to digital, or 'personalised and on-demand' services, was a key theme and was discussed in depth throughout an extensive customer and stakeholder engagement program that has informed this Regulatory Proposal. The program aims to address customer needs identified throughout the engagement processes, including:

1. Responding to customer concerns and service level recommendations including keeping customers well informed, enabling secure self-service options and providing an equitable customer experience during the energy transition.
2. More cost effectively maintaining compliance with applicable regulatory obligations / requirements including enhanced cyber security responsibilities for critical infrastructure providers within the updated Security of Critical Infrastructure Act 2018 and the Australian Energy Sector Cyber Security Framework.
3. To maintain the safety of our distribution network and system, in relation to the risks of harm to workers, consumers and community through provision of easy to access and clear information for customers when they need it.
4. To ensure the best long-term efficient cost for our customer and network services through the prudent automation of key processes.

5. To be compliant with reasonable and relevant consumer standards, in this case with reference to the universal Website Accessibility Content Guidelines (WACG)[5].

Table 3 summarises the costs and benefits from the preferred option for each of the underlying business cases that makes up this program.

The program aims to deliver **$99.1 million**[6] in benefits over 10 years, for an IT investment of $54.8 million during the 2025-30 RCP. In the 2025-30 RCP this investment consists of **$48.4 million** in project related expenditure (**$18.0 million** in capex and **$30.3 million** in non-recurrent opex) and **$6.5 million** in new recurrent opex. The 10-year net present value (**NPV**) is $18.6 million. (NB: We will not seek a step change for the recurrent opex but will seek to offset these using benefits across the ICT portfolio.)

This Customer Technology Program was discussed, in detail, with customer representative groups as part of the "Personalised and on demand Services" workshops during our extensive customer and stakeholder engagement process. A larger Program received strong support from customers during the Focussed Conversations. However, the People's Panel were unable to reach consensus (assessed as being 80%) on the proposed quantum of expenditure, the positive vote falling just short with 73% voting in favour of the initiative. Hence, we have responded by significantly reducing the scope and cost of the program. Overall customers want us to deliver seamless, easy to use and efficient customer services, and do so securely, efficiently and sustainably.

Table 3: Costs and benefits for the Customer Technology Program by Project for the 10-year period and the 2025-30 RCP, $m, $ June 2022 real[7].

AER ICT Expenditure Category	Project/ Business Case	10 Year Costs			2025 - 2030 Costs			10 Year Benefits	10 Year NPV
		Capex	Opex	Total	Capex	Opex	Total		
Large Upgrades & Replacements	Website Replacement	0.3	2.5	**2.8**	0.3	2.5	**2.8**	8.4	3.9
	Customer Notification System (CNS) Replacement	10.2	0.7	**10.8**	10.2	0.4	**10.5**	22.6	7.8
	Customer Portal Consolidation	3.4	14.5	**17.8**	2.7	10.9	**13.7**	16.2	-2.8
	Meter Data Insights (MDI) Replacement	0.4	2.0	**2.4**	0.4	1.9	**2.3**	6.7	3.3
	Customer Relationship Management (CRM) Replacement and Customer Data Consolidation	3.1	20.0	**23.2**	3.1	13.8	**16.9**	23.8	-1.9
	Total Large Replacements & Upgrades	**17.4**	**39.6**	**57.0**	**16.8**	**29.4**	**46.2**	**77.7**	**10.3**
New or Expanded Capability	Personalised on Demand Services	1.2	8.0	**9.2**	1.2	7.4	**8.6**	21.4	8.2
	Total New or Expanded	1.2	8.0	**9.2**	1.2	7.4	**8.6**	21.4	8.2
	Grand Total	**18.7**	**47.6**	**66.3**	**18.0**	**36.8**	**54.8**	**99.1**	**18.6**

[5] WCAG 2 Overview | Web Accessibility Initiative (WAI) | W3C

[6] Unless otherwise specified, all financial figures in this business case are in real June 2022 dollars.

[7] Note: Totals presented in tables throughout this document may not exactly match the sums of individual figures due to rounding.

3. Program Scope

3.1 Scope and Business Case Summary

The scope of this program is to replace ageing customer service systems as well as respond to customer demand and expectations by delivering new digital self-service experiences. Core customer service systems are used by both:

- Our customers: to obtain information and resolve enquiries with SA Power Networks
- Our employees: to efficiently and quickly manage and respond to customer enquiries

Six business cases have been proposed as a part of the Customer Technology Program which are:

1. Website Replacement: Replace the legacy website content management software used to publish content on the external http://www.sapowernetworks.com.au/ website.
2. CNS Replacement: Replace the legacy customer notification solution (**CNS**) which is used for managing and communicating planned work interruption notices to all customers including life support customers.
3. Customer Portals Consolidation: Replace various web-based customer-facing portals which are hosted by SA Power Networks with a modern consolidated solution.
4. MDI Replacement: Replace the MDI solution, which is a business-critical solution supporting metering reporting and analytics as well as customer decision making.
5. Customer relationship management system (**CRM**) Replacement: Replace the existing ageing CRM solution and consolidate various customer databases onto a single solution to reduce risk and deliver improved customer service efficiency.
6. Personalised on Demand Services: Develop new customer self service capabilities which delivers faster response times to key customer interactions and enquiries.

3.2 Program Scenarios, Customer Engagement and AER ICT Expenditure Categories

The proposed initiatives were categorised in line with a standard approach adopted by SA Power Networks for the build-up of the regulatory forecast and customer engagement process. (see Table 4) This approach was also strongly aligned to the Australian Energy Regulator (**AER**) Classification for ICT expenditure – which these business cases come under. The business case development was done based on the SA Power Network's ICT Forecasting Methodology and Business Case Structure.

The below table outlines the three scenarios SA Power Networks presented to customers to understand their preferences during the extensive engagement program that informed this Regulatory Proposal. This is discussed in more detail in section 6.

Table 4: Alignment of Business Cases with the Customer Engagement Program Scenarios and the AER ICT Expenditure Classifications

SA Power Networks Scenarios	AER ICT Expenditure Classification	Scenario Descriptions	Customer Technology Program Initiative/Business Case
Scenario 1 (basic) Basic self-services	ICT Recurrent	Customers can self-serve for a few core interactions only, accessibility limitations will continue to exist for customers who consume digital services through mobile devices and/or require the use of assistive technologies.	
Scenario 2 (maintain) Customer system replacement and consolidation	ICT Non-Recurrent: Large Replacements and Upgrades	Replace and consolidate ageing customer facing systems with modern fit-for-purpose solutions which improve customer experience, improve digital service accessibility, and deliver internal operational efficiencies.	• Website Replacement • Customer Notification System Replacement • CRM Replacement and Data Model Consolidation • Meter Data Insights Replacement • Customer Portal Consolidation
Scenario 3 (new value) Digital customer experience uplift	ICT Non-Recurrent: New or Expanded Capability	Provide customers with new digital services that cater to a broader range of customer service needs, including hosting new services for customers as part of the energy transition. In addition, provide customers with new channels of interaction with SA Power Networks such as webchat and a mobile application.	• Personalised on Demand Services

4. Strategic Drivers and challenges 2025-30

4.1 Key Drivers

Manage the increased growth of customer service interactions during a period of rapid industry transition

SA Power Networks has observed a significant growth in the number of customer service interactions across core services and digital engagement. Figure 2 shows that demand from customers to access information and services has increased by **276%** over the 5 years from 2017-2022.

	Services	Base year volume (2017)	Comparison year volume (2022)	Average p.a. volume increase %	Total volume increase %
Core Services	Unplanned outage reporting (phone and online)	49,890	107,826	23%	116%
	Planned outage notification jobs	6000	9700	12%	61%
	Life support customers registered	6,771	18,491	35%	173%
	Claims	610	1017	13%	67%
	Complaints	1100	2500	26%	130%
	New connections, alternations	20,424	19,123	0%	-2%
	General enquiries telephone calls	120,000	128,000	1%	6.70%
	Average general enquiries call time (mins)	5.28	8.7	13%	65%
Digital Channel Engagement	Website visitors (unique)	500,000	2,249,598	60%	300%
	Website page views	2,000,000	9,696,914	80%	400%
	Social media direct messages	2,500	6,000	28%	140%
	Social media posts	200	1,200	100%	500%
	Planned outage SMS notifications	238,374	724,860	40%	204%
	Unplanned outage SMS notifications	1,400,000	3,100,000	24%	121%
	Tailored outage notifications	16,485	356,859	164%	2000%
	Total interactions	**4,362,354**	**16,422,088**	**55%**	**276%**

Figure 2: 2017 to 2022 Customer Service Demand Growth

The increases in customer service demand are largely in response to the growing complexity of the energy sector, increased use of customer energy resources (**CER**) by the South Australian community and the push to electrify the home, which combines to offer our customers the opportunity to decarbonise and save money[8]. Currently, the electricity network delivers around 22% of state end-use energy and ultimately, we might supply 80%+ of South Australia's energy needs as the reliance on gas and transport fuels declines[9]. As more of the community electrify all aspects of their home, for example, cooking, heating and hot water and take up Electric Vehicles (**EV**s), it creates a higher dependency on the network as every aspect of a customer's day becomes dependent on electricity. We know this level of dependency demands a timely and responsive interaction with the customer. Figure 3: Energy Transition Growth shows the projected increases in CER volumes.

Looking forward to the 2025-2030 period, SA Power Networks expects continued growth in traditional core services while also managing increases in demand due to the continued energy transition. Figure 3 highlights the ongoing increases in projected uptake of customer energy resource technologies, projected to increase by **121%** and driving an increase in the number of customer interactions managed by SA Power Networks. These increases include a projected **80%** increase in contact centre demand in the 2025-2035 period (Figure 4), as customers reliance on electricity increases increasing their needs to interact and request services from SA Power Networks.

[8] https://www.rewiringaustralia.org/media/all-electric-homes-will-save-thousands-each-year-for-outer-metro-households
[9] Source: Australian Energy Statistics + SAPN

Services	Base volume (2025)	Future volume (2030)	Average p.a. volume increase %	Total volume increase %
Solar PV	386,714	493,425	5.5%	27.6%
Batteries	51,326	192,797	55%	275.6%
EV	31,674	264,026	146.6%	733.6%
Flexible Exports (Residential)	57,143	216,083	55.6%	278.1%
Total interactions	**526,857**	**1,166,331**	**24%**	**121%**

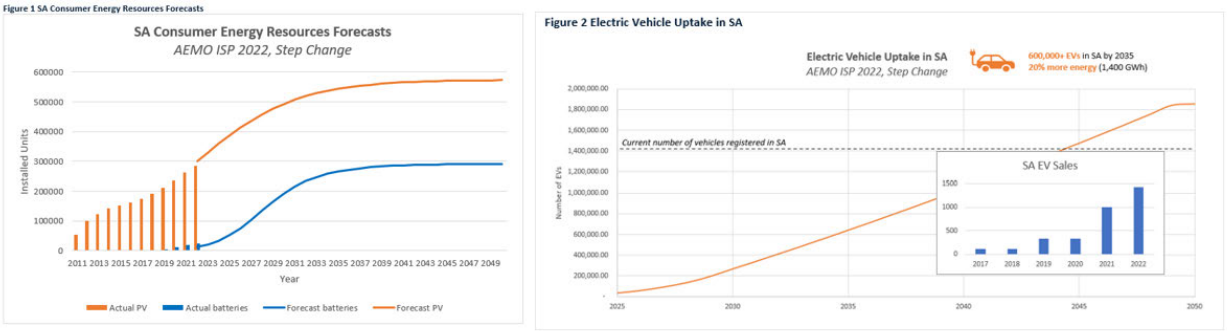

Figure 3: Energy Transition Growth

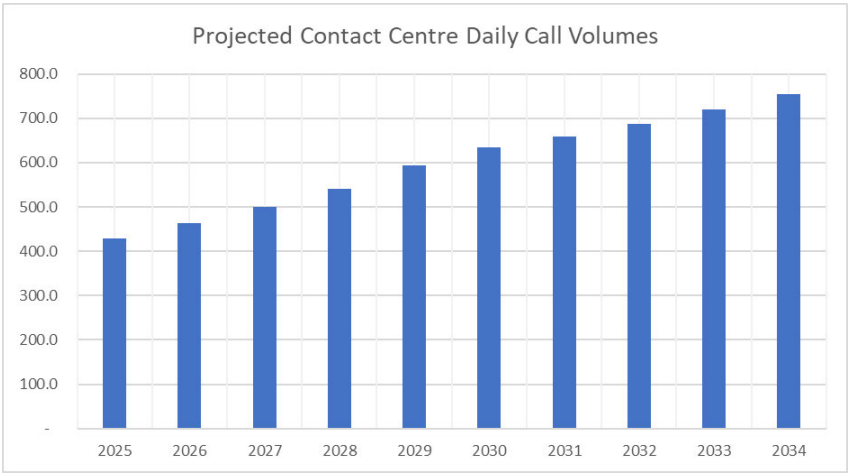

Figure 4: Projected Contact Centre Daily Call Volume Average

Respond to increased digital literacy in our customer demographic

The number of digital savvy customers (those who preference digital services over traditional channels) makes up the greater portion of the customer base and therefore there is an expectation from these customers that SA Power Networks can deliver reasonable levels of digital service.

We cannot meet customers expectations for accessible and useable services

A number of our digital services currently do not comply with modern accessibility standards, meaning that our services do not adequately support those customers who rely on assistive technologies such as screen reading, text to speech software or who face language barriers.

Unable to meet customers preference for mobile interfaces and technologies

With our website reaching 9.6 million visits in 2022, (an increase of 3 million from 2021), and with the majority (54%) of these customers visiting via their mobile device, our customers expect an easy, efficient and mobile friendly digital experience when accessing our services which we are currently unable to meet with our ageing technologies.

Unable to maintain existing levels of service and manage cyber security risk
The platforms on which core customer technology services are hosted are ageing and have reached end of life, posing a risk to our cyber security posture, and /or they do not fit into the future application architecture planned by SA Power Networks. They are becoming increasingly complex to maintain, requiring significant financial and resource investment by SA Power Networks.

Maintaining the various security measures required across the different customer portal solutions is also becoming increasingly complex. Maintaining a strong security posture across the portals, each with unique data security requirements, becomes more difficult as the cyber threat continues to escalate. [redacted]

Deliver customer time saving through targeted investment in new digital services and process efficiencies (high volume, high value scenarios)
The current process and systems in place to manage customer service are inefficient, legacy systems that are not designed to and cannot support the demand for fast, seamless, and self-service capabilities which are being increasingly sought after by our customers.

We have observed that, how customers wish to interact with us is changing in line with the evolution of digital customer services, with more people preferring to use online services at a time of their choosing presenting an opportunity for SA Power Networks to leverage digital services to serve customers in their preferred channels, while minimising cost of customer service delivery during a period of industry transition.

The new digital self-services will provide:

- Improved experiences and quicker services for customers in line with their expectations.
- New digital self-services will be delivered for core service interactions for: connection/disconnection status updates information, property access information, claims, complaints, general enquiries.
- Hosting new services as part of the energy transition and new channels of interaction with SA Power Networks such as a mobile app interface.

4.2 Strategic alignment

We understand the future of energy across Australia is progressing at an extraordinary rate. We are thinking and planning for what this world of new technologies, changed community expectations and innovative energy services will hold, evidenced in our Customer Strategy[10], as summarised in figure 5.

This program supports the Customer Strategy 2022-2026 and our priorities to 'transform performance' by modernising and streamlining customer-centric operations and being 'digital by choice' enhancing and personalising service experiences, drawing customers to online channels. This program will specifically support in providing efficient, cost effective, consistent, and secure experiences across our contact channels so we can provide customers with secure choice in how they interact with us. We can ensure the equity of access and experience for all our customers and achieve our commitments to being easy to deal with and keep our customers informed (Customer Charter[11]). These expectations of customers more clearly articulated to SA Power Networks through extensive qualitative and quantitative research that occurred across the SA Power Networks customer base in late 2021.

[10] Customer Strategy 2022–2026
[11] https://www.sapowernetworks.com.au/public/download.jsp?id=10324#:~:text=At%20SA%20Power%20Networks%20we,supply%20point%20on%20your%20property.

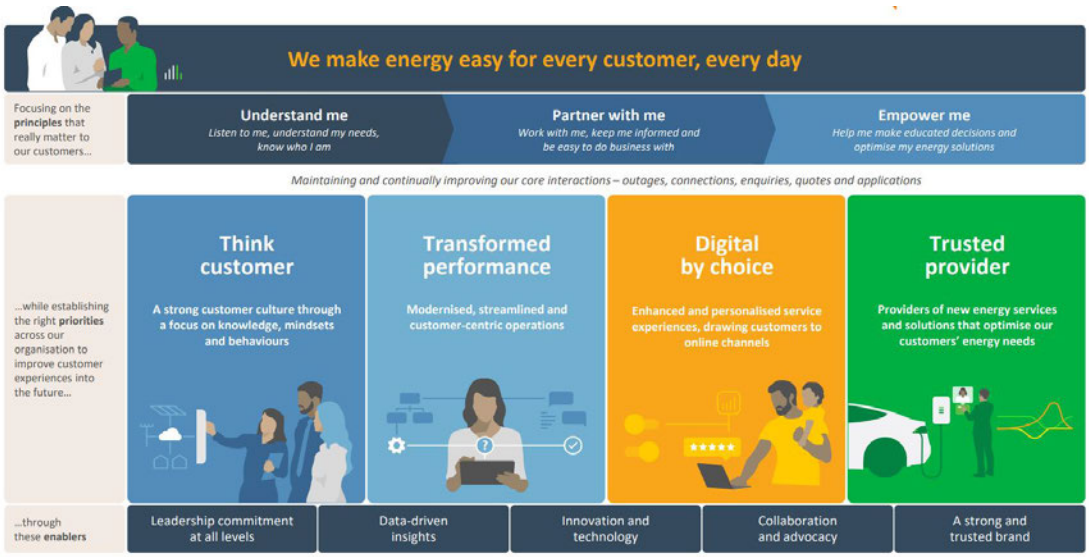

Figure 5: Customer Strategy 2022-2026 on a page

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

5.1 Program level summary

Table 5 summarises the 2025-30 costs and benefits. To deliver the $99.1 million in benefits over the 10 years the expenditure request is $48.4 million in the 2025-30 RCP. This consists of $18.0 million of capex and $30.3 million of non-recurrent project based opex – the costs of implementing predominantly Software as a Service based solutions.

These projects result in an additional $6.5 million of recurrent opex, mainly associated with the additional ongoing cost of Cloud subscriptions. However, we are not asking for a step-change and will instead seek to offset these increases with benefits from the overall IT portfolio of work.

Our whole Program has a net positive NPV of $18.6 million. The lowest NPV is generated by the CRM Replacement Project (-$1.69 million) and Customer Portal Consolidation (-$2.72 million), due to the overall cost of the change. The CRM Replacement is a key enabler for every other part of the program; hence the rest of the program benefits are not achievable without that initiative being undertaken. The Portal Consolidation is a key foundational enabler for a consolidated digital self-service experience across a broad range of services and will support the unlocking of **$21.4 million** of benefits identified in the Personalised on Demand Services business case.

Table 5: Costs for the Customer Technology Program by Project for 2025-30 RCP, $m, $ June 2022 real.

AER ICT Expenditure Category	Project/ Business Case	2025 - 2030 Costs					10 Year Costs	10 Year NPV
		Non-Recurrent Capex	Non-Recurrent Opex	Project Total	New Recurrent Opex	Total		
Large Upgrades & Replacements	Website Replacement	0.3	2.1	2.5	0.3	**2.8**	2.8	3.9
	Customer Notification System (CNS) Replacement	10.2	-	10.2	0.4	**10.5**	10.8	7.8
	Customer Portal Consolidation	2.7	9.7	12.5	1.2	**13.7**	17.8	-2.8
	Meter Data Insights (MDI) Replacement	0.4	1.7	2.1	0.1	**2.3**	2.4	3.3
	Customer Relationship Management (CRM) Replacement and Customer Data Consolidation	3.1	9.4	12.5	4.4	**16.9**	23.2	-1.9
	Total Large Replacements & Upgrades	**16.8**	**23.0**	**39.8**	**6.5**	**46.2**	**57.0**	**10.3**
New or Expanded Capability	Personalised on Demand Services	1.2	7.4	8.6	-	8.6	9.2	8.2
	Total New or Expanded	**1.2**	**7.4**	**8.6**	**-**	**8.6**	**9.2**	**8.2**
	Grand Total	**18.0**	**30.3**	**48.4**	**6.5**	**54.8**	**66.3**	**18.6**

The non-recurrent opex reflects the shift to Software as a Service (SAAS) solutions that we expect to implement for those projects given the available technology options. We are seeking an opex base year adjustment of $30.3 million for these costs. Appendix A provides a more detailed breakdown of this adjustment request.

5.2 Program level benefits summary

The Customer Technology program provides $99.1 million of benefits across a 10-year period, with the majority of benefits being related to future cost avoidance. Table 6 provides a summary of the 10-year benefits by high level benefits category.

Table 6: Summary of benefits by benefits category

Category	Description	10 Year Benefits ($m)
Customer Time	Customer time saved from improved phone and online interactions across the program[12]	**10.7**
Cost Avoidance	Staff time avoided across Customer Services and Operations teams with improved enquiry volumes and handling times	25.62
	Notification administration overhead avoided, assuming increased network activity and improved LV network map accuracy, reducing manual verification and checks	8.5
	Technical debt avoidance due to strategic and orderly implementation of modern technology solutions, avoiding rework and additional implementation effort later on.	11.5
	Additional system support and maintenance costs avoided	7.37
	Avoiding the costs associated with the base case option, that is the increased costs in licensing and systems costs for continuing as we are	17.6
	Avoiding costs associated with additional communications eg. SMS, mailouts etc.	5.5
	Total Cost Avoidance	**76.1**
Risk Monetisation	Monetisation of avoidance of risk associated with cyber security incidents, CNS life support customer breaches and regulatory fines	**6.6**
Cost Savings	Reduction in licensing & maintenance costs associated with existing systems, and communication costs	**5.6**
	Total Benefits	**99.1**

Table 7 provides the summary of the benefits by initiative and high-level benefits category for the five- and ten-year views. Each initiative contributes differently to the overall program. The largest sets of benefits are from the CRM Replacement ($23.8 million), the Customer Notification System Replacement ($22.6 million), the New Self Service implementation ($21.4 million), and the Customer Portal Consolidation ($16.2 million).

The cost saving benefit of $1.8 million will be used to partially offset the increases in recurrent opex of $6.5 million, but we will still need to find the remainder of the recurrent opex increase ($4.68 million) from other changes across the portfolio.

[12] Customer time benefit was costed using the average South Australian weekly earnings rate from the Australian Bureau of Statistics together analysis of historic customer interactions trends.

Table 7: Benefits for the Customer Technology Program by Project and high-level benefits category for the 2025-30 RCP, $m, $ June 2022 real.

AER ICT Expenditure Category	Project/ Business Case	5 Year Benefits (2025 – 2030)					10 Year Benefits	10 Year NPV
		Cost Savings	Cost Avoidance	Customer Benefits	Risk Monetisation	Total		
Large Upgrades & Replacements	Website Replacement	0.4	1.2	0.1	-	1.7	8.4	3.9
	Customer Notification System Replacement	0.0	7.0	0.0	0.3	7.4	22.6	7.8
	Customer Portal Consolidation	0.1	2.0	0.6	0.8	3.5	16.2	-2.8
	Meter Data Insights Replacement	-	3.0	0.5	-	3.5	6.7	3.3
	CRM Replacement and Customer Data Consolidation	1.4	5.3	0.1	-	6.7	23.8	-1.9
	Total Large Replacements & Upgrades	**1.8**	**18.5**	**1.3**	**1.1**	**22.7**	**77.7**	**10.3**
New or Expanded	Personalised on Demand Services	0.0	1.7	0.5	-	2.2	21.4	8.2
	Total New or Expanded	**0.0**	**1.7**	**0.5**	**-**	**2.2**	**21.4**	**8.2**
	Grand Total	**1.8**	**20.2**	**1.8**	**1.1**	**24.9**	**99.1**	**18.6**

Full details of the costs and benefits are provided in the supporting business cases.

6. Customer Engagement and Input

6.1 Broad and Diverse Engagement Workshops

As part of our overall stakeholder and consumer engagement plan, we facilitated a series of targeted and regional workshops. These conversations focused on our four key themes including the "Customer experience, choice and empowerment" theme relevant to this program.

The Customer Experience theme accounted for 24% of all comments received, key feedback indicated that customers most value:

- Quality of communications
- Responsiveness
- Trusted advice
- Digital tools to support customer services and communications.

The feedback captured helped inform future engagement on this topic for 'Focussed Conversations' outlined in section 6.2.

6.2 Focussed Conversations

The full Customer Program was discussed during the "Customer Experience and Interaction" Focused Conversation workshop in September 2022. Three scenarios were presented to six groups of customer representatives and advocates (18 people):

- **Scenario 1 basic self-service** – the base scenario and represented "as is" no change scenario.
- **Scenario 2 customer system replacement and consolidation** – this scenario was composed of all the projects within the Customer Technology Program involving replacements and upgrades (including the CRM and customer data replacement)– reflecting what needs to be done to maintain our existing levels of customer service in a rapidly transitioning energy environment.
- **Scenario 3 digital customer experience uplift** – this scenario added significant customer experience and digital channel improvements – reflecting 'new value' for customers.

The customer representatives were presented with details and the pricing impacts for each scenario. Following detailed conversations participants provided feedback by being placed into groups to discuss the scenarios.

All groups unanimously supported the replacements and upgrades (Scenario 2) with the majority of the support (four out of six groups) for the 'new value initiatives' (Scenario 3).

A sample of comments and discussion items include:

- *Accessibility is very important, especially at a time of significant change, you need to meet accessibility guidelines as a minimum;*
- *The website is a powerful way for customers to easily receive information from SA Power Networks, consideration should be applied to eliminating the need to login where this makes sense;*
- *A lot of the services are not only disjointed but they are also SA Power Networks centric and do not consider the customer's experience;*
- *The ability to self-manage personal information and self-serve is very important (opt-in as needed);*

- *Being able to see history of interaction will be helpful for customers;*
- *Scenario 3 has benefits to customers and business alike (e.g. efficiency savings and happier customers);*
- *Getting more personal with customers, provide greater levels of visibility regarding the data SA Power Networks have;*
- *Security and data management needs to be considered as part of the design of digital services, cyber security is very important, especially with personalised services requiring customer details;*
- *Important to integrate communication channels;*
- *Important for SA Power Networks to bring customer service solutions in line with other service sectors*[13].

6.3 People's Panel

Given the strong support from the Focussed Conversation for the scenario 3 expenditure, we presented the digital customer experience uplift components to the People's Panel in March 2023. Customers indicated that they are seeking access to more accurate and timely information and want greater levels of self-service through improved digital channels, however there were differing views on the appropriate levels of expenditure (and customer price impact) to deliver desired improvements. The People's Panel were unable to reach consensus on the proposed quantum of expenditure, the positive vote falling just short of the People's Panel self-determined requirement of 80% to achieve 'consensus' (24 of 33 or 73% voted for the proposed Scenario 3).

In response to the lack of total consensus from the People's Panel we have therefore proposed a more modest expenditure and scope, less than half of the initial proposal, in the "New Self Service Business Case". This is designed to maintain current levels of service, with some targeted self-service improvements to high volume customer interactions. This response is aligned to the People's Panel feedback.

6.4 Draft proposal feedback

Feedback obtained from customers as part of the draft proposal specific to the 'personalised on-demand services' is summarised below:

- The People's Panel expressed support for our draft proposal, including endorsing the more modest expenditure proposed for the 'New Self Service Business Case discussed in section 6.3.
- The majority of customers who provided feedback voiced their approval of the investments aimed at maintaining current customer experience levels.

6.5 Willingness to Pay Survey

During our stakeholder engagement program, we also engaged an independent consultant to conduct a Customer Values Research survey study as another means to gain insights into customers' willingness to pay for specific elements of our proposal, including the question of enhancing personalised on demand services provided by 2030. This study included an online poll of a statistically representative sample of 1,250 South Australian residential households and used a 'discrete choice' methodology that exposed respondents to a broad range of hypothetical bill impacts associated with different service levels in each area. A statistical analysis was then undertaken to estimate customers' overall average willingness to pay for different service outcomes. The results indicated that South Australian households, on average, are willing to pay for new self-services outlined in the New Self Service business case, as the current "New Self Services" proposals bill impact is actually less than the indicated willingness to pay.

[13] Customer Experience and Interactions | Talking Power

7. Portfolio Development and Deliverability Planning

7.1 Program Overview

The program is comprised of six initiatives intended to deliver the required customer service platform capabilities required by both our customers to access information, log requests and resolve enquiries, and by our employees to quickly manage and respond to customer enquiries.

The program assumes a progressive build of capabilities over time, commencing with the core CRM capability as a foundational investment that will be extended with additional services investment across the period.

Figure 6, shows the tight dependency between the proposed initiative and progressive build of capabilities over time, returning positive benefits to customers and SA Power Networks across next period and extending into the 2030-2035 period.

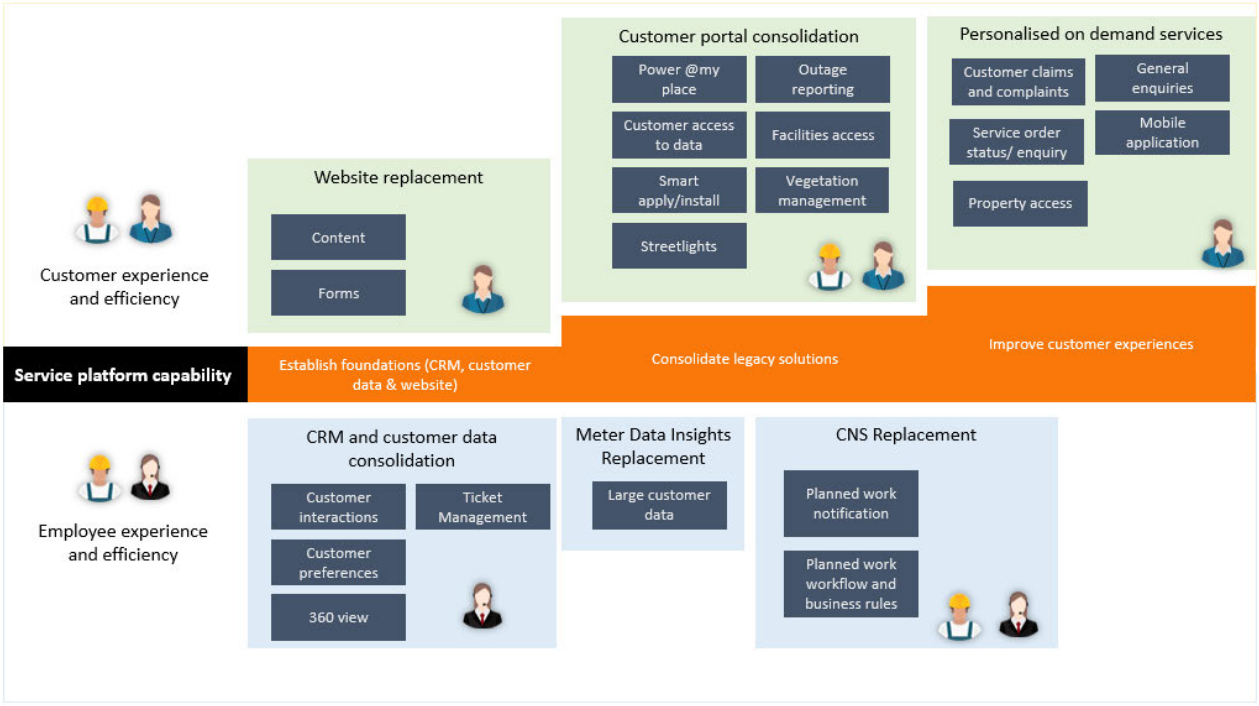

Figure 6: Proposed 2025-2030 Customer Technology Program

7.2 Supporting Technology Capabilities

The program is underpinned by a number of shared core technology capabilities, where a number of shared capabilities will need to be implemented as part of the CRM and customer data consolidation business case. The remaining initiatives will reuse and build upon many these capabilities (Figure 7).

The re-use of core technologies will enable a consolidated customer service platform to be introduced. The platform will enable a closer integration between customer and employee experiences and provide modern service features aiding re-use, extensibility, and continuous improvement to be achieved. The consolidated platform approach will provide a cost-effective solution to be built as part of the core replacement program and extended to new self-services capabilities as defined in Figure 7.

	Initiatives/Business Cases					
Customer Technology Program – Technology Capability Requirements	**Replacement Business Cases**					**New Value Business Case**
	CRM and Customer Data Consolidation	**Customer Portals Consolidation**	**CNS Replacement**	**Website Replacement**	**MDI Replacement**	**Personalised & On-Demand Services**
Customer Centric Data Model	Replace	Reuses	Reuse		Reuse	Reuse
Notification Preference Management	Replace		Reuse			Reuse
Customer Account Detail Management (service console)	Replace	Reuse	Reuse			
Alerts and notifications	Replace	Reuse	Reuse			Reuse
Interaction history	Replace	Reuse	Reuse			Reuse
Integration	Replace	Reuse	Reuse		Reuse	Reuse
CRM & Telephony Integration	New					
Case Management	Replace	Reuse				Reuse
Document Exchange and Collaboration	Replace	Reuse				
Payment Gateway	Replace	Reuse				
Consolidated self-service interface		Replace	Reuse			Reuse
Customer feedback/surveys	Replace	Reuse	Reuse	Replace		Reuse
Reporting and analytics	Replace	Reuse	Reuse	Replace	Replace	Reuse
Website content management				Replace		Reuse
Digital Forms and workflow	Replace	Reuse		Replace		

New software/capability
Reuse software/capability added by a replacement business case

Figure 7: Customer Technology Program – Initiative to Capability Mapping

7.3 Delivery Plan

The implementation of the program largely occurs in the 2025-2030 period, with an initial focus on the replacement of the core CRM and consolidation of data solutions. The CRM is a core foundational capability which will be replaced and reused by the various initiatives making up the program. The implementation plan has considered the key technical dependencies existing between the initiatives, the initiatives have subsequently been sequenced to ensure maximum reuse of the core CRM capability and avoids rework. The high-level implementation plan is outlined in Figure 8.

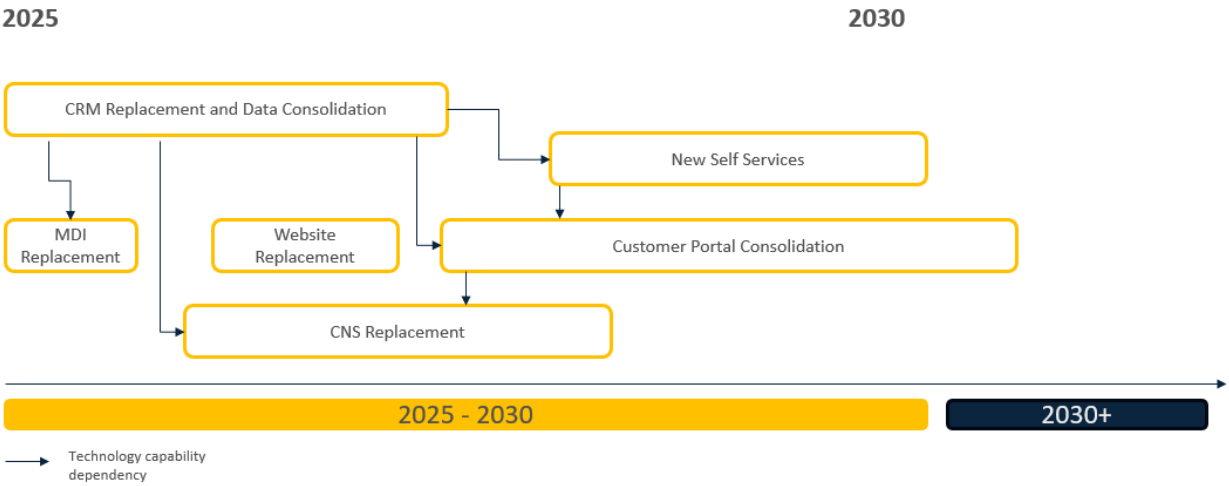

Figure 8: Customer Technology Program Implementation Plan

The delivery approach assumes shared project resources across the Customer Program (Program Manager, pool of skilled delivery Full Time Equivalent including Architect, Business Analyst, Developers and Testers), the approach avoids ramp down/ramp up costs and supports a lower cost/more efficiency delivery. This approach is consistent with the Program Delivery Methodology used for similar projects at SA Power Networks. If a program approach is not adopted, the efficiency opportunity is missed, resulting in an estimated increase of 15-20% in program costs.

7.4 Program Delivery Risks

In building a long-term program, we have considered the key delivery risks and have identified mitigating controls which will sufficiently manage and minimise the risk likelihood.

Key program delivery risks relate to:

- Change management- embedding a new platform capability within appropriate teams and ensuring appropriate change management to maximise value derived from the solution;
- Embedding the required technical skilled resources to ensure the ongoing management and maintenance of the solution;
- Enabling complex integration points to existing back-office systems including SAP ISU and ERP systems.

The noted risks are mitigated through a delivery approach which will ensure:

- Highly skilled project delivery staff which have previous experience in delivering similar solutions at SA Power Networks;
- Access to highly skilled technical SME's who have built a strong understanding of integration methods to SAP related solutions;
- Access to vendor capabilities offered in the market to support implementation activities; and
- Access to business SME's with strong understanding of the processes and access to a comprehensive knowledge repository which continues to be maintained.

8. Benefits and Cost Estimating Approach and Assumptions

The proposed costs for each option were estimated through completion of a detailed project cost model that was structured according to SA Power Networks' standard IT project methodology. This approach structures an IT project into six phases that are further broken down into a total of 20 sub-phases that are then used to plan and cost the project. (Refer to Table 8).

Table 8: Structure of SA Power Networks IT Project Methodology

Phase	Sub-phase
Phase 1- Planning, Project Management and Coordination	Planning, Project Management and Coordination
Phase 2 - Feasibility, Innovation & POCs	Feasibility, Innovation & POCs
Phase 3 - Develop & Plan	Plan
	Requirements
	Business Case
	Vendor Selection
Phase 4 - Implement - Design & Architecture	Implement - Design & Architecture
Phase 5 - Implement - Build & Test	Software Licensing (12-month upfront purchase)
	Hardware Infrastructure Changes
	Client Device Purchases
	Development
	Configuration
	Integration
	Data Conversion & Migration
	Testing
Phase 6 - Implement - Deploy	Training Delivery
	Training Materials & Preparation
	Warranty
	Change Management
	SME Backfill

The nature of each project was flagged as to whether it was to be based on a SaaS solution or was to be an on-premise implementation. This ensured that the modelling resulted in the appropriate accounting treatment of the expenditure – as operating or capital expense.

The effort required for the specific roles relevant to each phase of the project (e.g. project manager, architect, developer, tester etc.) was estimated based on SA Power Networks staff and our external consultants' experience of similar past projects in SAPN and at other organisations. This effort was split according to SA Power Networks' standard internal staff/external services mix of 20% internal staff and 80% external services, costed using SA Power Networks standard IT cost estimation methodology and standard resource rate card.

Where possible, external expenses, such as licence fees and external system integrator costs, were based on actual quotes, published licence fees/rates etc. or market research[14]. In other cases, the experience of SA Power Networks staff and our external consultants of the costs incurred in similar projects at SA Power Networks and at other organisations, was used to provide a reasonable estimate of the costs. All costs were initially calculated bottom up and then validated/refined with top-down analysis.

[14] SAPN-DXP Market scan results (v2.0) – BDO 2021

Benefits estimates

An extensive and iterative process involving business and IT representatives was undertaken to define a set of reasonable benefits for this program.

This process aligns with our Value Framework and SA Power Networks' ICT Forecasting Methodology. The use of factual historical data and future forecasts derived, where possible, from external sources such as Australian Energy Market Operator (AEMO), ensures an industry best practice approach that meets AER and community expectations and results in a justifiable and reasonable estimate of the benefits. Where relevant, we have undertaken sensitivity analysis to understand the degree to which the benefits vary with changes in the key assumptions and so ensure the robustness of the calculations.

Avoiding increases in costs incurred under Option 0 – Business as usual

- Estimates were made as to the projected increase in relevant costs under a business as usual (**BAU**) scenario (i.e. without the proposed investment). These typically related to increases in contact centre call volumes and SMS communications resulting from the planned increase in network maintenance activity and the general increase in the complexity of the electricity industry being experienced by customers. The volume increases vary according to the call type/subject matter and therefore impact each technology/service area differently.
- These projected cost increases were initially used in costing Option 0 as they represent a cost of not undertaking any additional investment. Subsequently, when calculating and comparing the NPVs of the individual options, the part of these costs that was also being treated as a cost avoidance benefit was removed from the total benefits related to Options 1 and 2. This ensured that they weren't being double counted in the initial calculations.
- Following this, the NPV of Option 0 was set to NIL and instead treated as a cost avoidance benefit in the other options. This ensures that these BAU cost increases were being properly reflected as an 'avoided cost increase' from undertaking the proposed investment under Options 1 and 2.
- Whilst the assessed options above would actually result in a number of the projected costs being reduced below their assumed FY25 baseline, to be conservative, we have capped any claimed benefits to the increase above that baseline. These benefits are therefore fully characterised as *avoidance of future cost increases*, rather than as a reduction in the existing cost base.
- The time saving from the reduced number of contact centre calls, including 'on-hold time' etc, was also translated into a saving in time for the customer. This was costed using the average South Australian weekly earnings rate from the Australian Bureau of Statistics. (Note: this was NOT part of the Option 0 costs referred to above as it does not represent a direct cost to the business).

Other cost savings and efficiency gains

- Several other cost savings and efficiency gains were identified through discussion with business representatives. Estimates of the impact of the investment on these cost areas were made based on actual current costs being incurred, the knowledge and experience of SA Power Networks business & IT staff and advice from external consultants, as appropriate. In all cases the benefits were assumed to start from the year following completion of the investment. The benefits were also 'phased in' such that the full calculated annual benefit took time to be realised, where appropriate to do so. For example, as take up and use of the new website is projected to grow over time.
- A significant contributor to the benefits from this (and other) customer technology business cases is avoiding the future cost impact of 'Technical Debt'. Continuing to use and maintain old and out of date IT infrastructure and systems has significant implications for the future cost of not only that specific infrastructure, but of any maintenance and development activity in the IT environment. There is an increased cost overhead involved in the ongoing maintenance of compatibility and integration of these

old systems with any new developments, as well as with each other. This has been estimated, based on the level of dependency with key projects and systems in the IT portfolio. The benefit of avoiding this cost of technical debt has been phased in and apportioned between relevant projects, based on the estimated reusability of the capability delivered by each project.

Growth projections

- Wherever possible, when % growth projections were used in the modelling, these were derived from actual cost and volume trends, external data (e.g. AEMO projected EV take up by customers) or future plans from the business (for example, increase in network asset maintenance). The advice of our external consultants and the experience of key business representatives were used to derive the likely future decreases in costs resulting from the investment.

Shared benefits

- Where an estimated cost avoidance/reduction was considered to result from the combination of more than one investment (e.g. it required both the new website and consolidated portals) then the derived benefit was apportioned between the relevant projects according to their estimated contribution to achievement of those benefits.

A. Appendix A - Base-year opex adjustment (preferred option)

The following provides a summary of the requested opex changes for the base year adjustment.

Category	Project/Business Case	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025 – 30
Base-year adjustment: Accounting treatment change	Website Replacement	-	-	1.2	0.9	-	2.1
	Portal Consolidation	-	-	3.4	3.2	3.1	9.7
	MDI Replacement	1.7	-	-	-	-	1.7
	CRM Replacement and Customer Data Consolidation	3.7	5.1	0.5	-	-	9.4
	New Personalised on Demand Services	-	-	-	1.4	6.0	7.4
	Total base-year opex adjustment	**5.5**	**5.1**	**5.1**	**5.5**	**9.1**	**30.3**

Accounting treatment change

Topic	Detail
Background	Accounting rule clarification in early 2021 confirmed that the costs of configuring and customising application software in a cloud-computing or SaaS arrangement should not be capitalised, with the business no longer having control over the asset. The impact for the Customer Program is switching from capex to opex as majority of the likely solutions are more readily offered as SaaS.
Request	A base-year opex adjustment of $30.3 million across the overall Customer Technology Program.