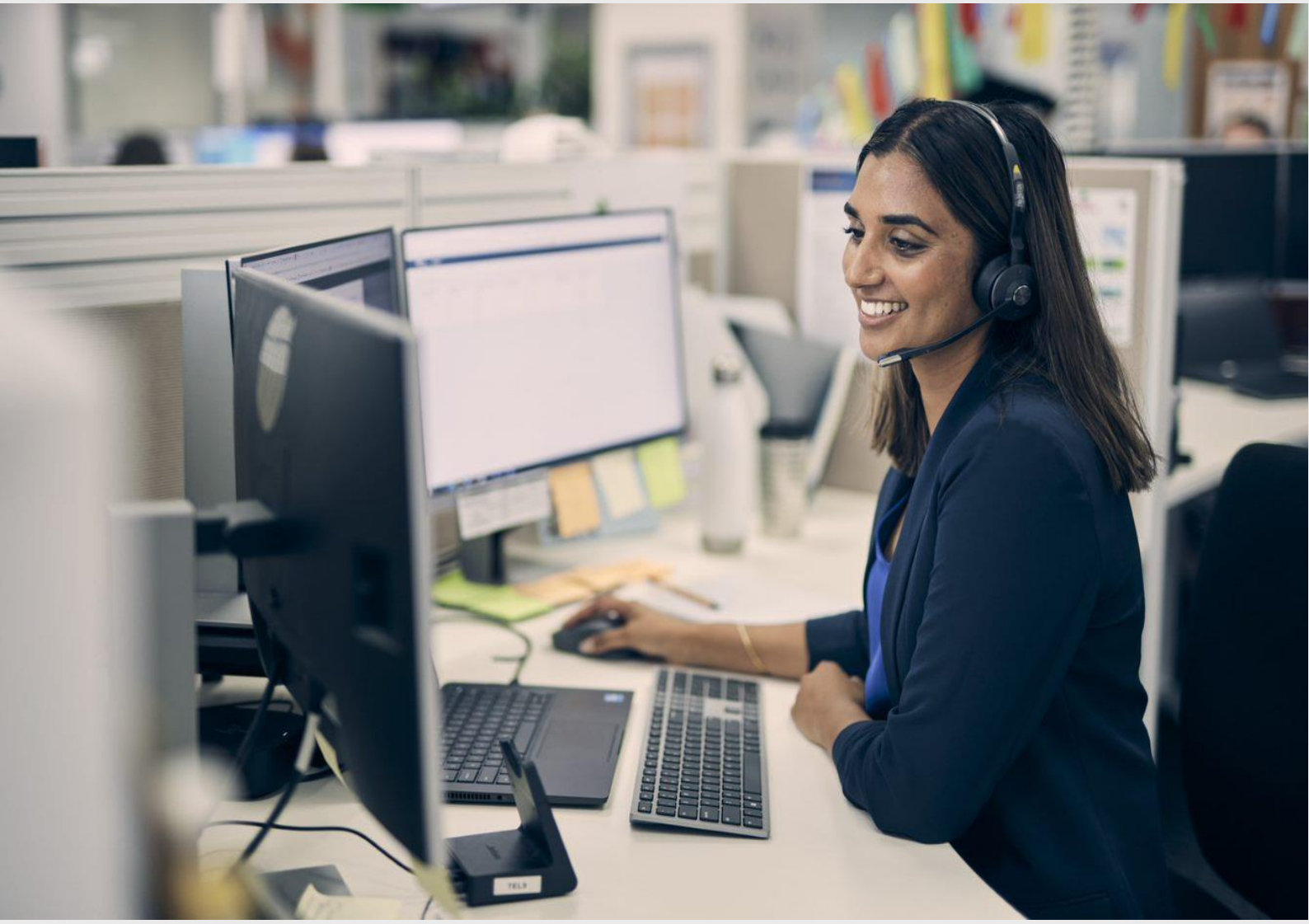


Business Case – ICT Non-Recurrent Customer Technology Program: CRM Replacement & Data Consolidation

2025-30 Regulatory Proposal

Supporting document 5.12.21

January 2024

SA Power Networks

Empowering South Australia

Contents

Glossary

Acronym / term	Definition
BAU	Business as usual
Capex	Capital expenditure
CDP	Customer data platform
CRM	Customer relationship management system
DNSP	Distribution Network Service Provider
EV	Electrical Vehicles
FTE	Full Time Equivalent
ICT	Information and Communication Technology
IT	Information Technology
MDI	Meter data insights
NER	National Electricity Regulation
NMI	National Metering Identifier
NPV	Net present value
Opex	Operating expenditure
RCP	Regulatory control period
SME	Subject Matter Expert

1. About this document

1.1 Purpose

This business case details the forecast expenditure for the 2025–30 Regulatory Control Period (**RCP**) to replace our Customer Relationship Management system (**CRM**) and consolidate our underlying customer data models.

1.2 Expenditure category

- Non-network Information and Communication Technology (ICT) capital expenditure (**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
5.12.22 - Customer Program: Personalised on Demand Services Business Case	SA Power Networks	Jan 2024
5.12.27 - Program Overview - Customer Technology Program	SA Power Networks	Jan 2024
IT Asset Management Plan	SA Power Networks	Jan 2024

2. Executive summary

As the primary distributor, we have a relationship with all electricity consumers in South Australia and have made a commitment that we will be easy to deal with, keep our customers informed and provide them with convenient and accessible services (SA Power Networks Customer Charter[1]).

Customer service expectations can only be achieved through the reliance on a fit-for-purpose customer service solution, commonly referred to as customer relationship management (CRM). Our current CRM was implemented three years ago through a minimal viable product approach; the CRM is now heavily utilised by customer services teams.

The CRM is currently used to manage data and interaction records for 860,000 customers, support 300,000 phone calls and fulfil 30,000 customer service request tickets. The average per-annum growth in the number of customer interactions is increasing overall, with observed growth of 15% for general telephony and enquiry services, 70% for digital channels, and 145% for the new energy services.

Our ageing CRM technology is posing a high risk 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 energy transition will only result in increased growth and complexity of our customer interactions into the 2025–2030 period and beyond, driving a need for us to ensure our CRM is fit for purpose and allows us to meet our customer service commitments into the future.

The CRM solution must be replaced in the 2025–30 period as:

- 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
- the CRM technology is a key enabler for $99.1 million[2] of benefits to be delivered as part of the Customer Technology program
- functional limitations and gaps currently exist that can only be prudently resolved through the replacement of the CRM and its underlying customer data model in the 2025–2030 period.

Additional key drivers for the replacement of the CRM and underlying customer data models are:

- A suitable CRM is fundamental to supporting the efficient response to customer enquiries and requests for services, such as new requests for customer energy resources.
- Ensuring the ongoing cyber security posture is managed through the consolidation and replacement of a number of customer data repositories that have evolved over time across the SA Power Networks landscape.
- Improving quality of customer data, including eliminating the current risk and overhead of outdated customer data management practices including overwrite of customer records upon customer move in/move out (approximately 14,000 customer data records are overwritten on a monthly basis).
- Supporting organisational efficiency and knowledge retention through a single source of truth for customer data and interactions.

The current CRM solution has been defined as end of life, as the vendor has indicated that their long-term CRM roadmap is focused on a new version of the product and that future enhancement investments for our current version will be contained. While the vendor will continue to provide support to 2030, this support is limited to break/fix only, which is not acceptable for a core business platform. We require vendor

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

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

commitment to the long-term direction of our core solutions and have therefore concluded that our CRM is posing a high risk to our ability to maintain existing services and needs to be replaced given it is end of life, effective immediately.

The current state of customer technologies is characterised as legacy and disjointed, presenting inefficiencies in customer services. The objective is to de-risk, modernise and simplify ageing technologies, providing customers with a consolidated entry point, as illustrated in Figure 1. The CRM is a core part of enabling a better customer experience and improving productivity and a key foundational technology required to support delivery of many of the future benefits to be gained - refer to Customer Technology Program Overview and associated Customer Technology program business cases.

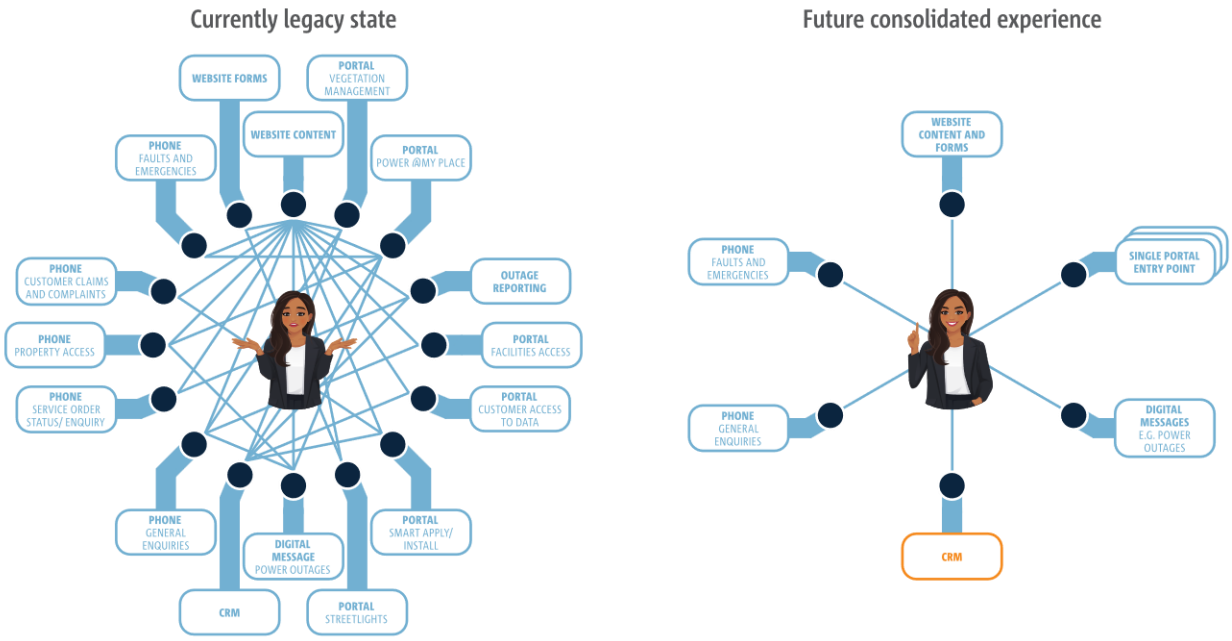


Figure 1: A representation of customer interfaces and services before and after legacy system replacement

Not replacing the CRM during the upcoming RCP will increase our risk and significantly increase the costs of the projects that are dependent upon it, as well as creating a significant technical debt – essentially, because all the solutions must be reworked once we put a new CRM in place, effectively paying for parts of the new solutions twice.

This business case recommends replacing the current solution with a new CRM system and a consolidated customer data model solution. The total expenditure for this preferred option is $23.2 million, of which $17.0 million is within the 2025–30 RCP. The 2025–30 RCP forecast is $3.1 million of non-recurrent capex, $9.4 million of non-recurrent opex, and $4.4 million of recurrent opex3. The net present value (**NPV**) over the 10-year period is -$1.9 million and the overall residual risk rating is Medium (see Table 2).

Other options considered were:

- **Option 0 - Continue with the current CRM system:** Not recommended as high levels of risk and technical debt will accumulate, due to the need to maintain an unsupported system while enabling new capabilities. Furthermore, customer service efficiencies will not be realised during a time of increased growth in customer services interactions. There were no quantified benefits, so the NPV was $0 and the residual risk was High.

[3] The $4.4 million of recurrent opex required during the 2025-30 RCP will be funded through business efficiencies. The recurrent opex is included for completeness on the NPV and we are not proposing a step change. We will seek to offset the costs with expected benefits.

- **Option 1 - Invest in additional solutions to support the existing CRM software:** Not a prudent option as the existing solution will no longer be supported and does not support efficient customer service delivery. The gaps can only be addressed through additional investment in other bolt-on products. The costs to implement this surpassed the quantified benefits; the NPV was -$8.0 million and the residual risk was Medium.

Table 2 Costs, benefits and risks of alternative options relative to the base case over the 10-year period, $m, $ June 2022 real[4].

	Total program costs			2025–2030 costs			Benefits	NPV[5]	Risk level[6]	Ranking
Option	**Capex**	**Opex**	**Total**	**Capex**	**Opex**	**Total**				
Option 0 – Continue with the current CRM system (Base case)[7]	–	–	–	–	–	–	–	–	High	Not credible
Option 1 – Invest in additional solutions to support the existing CRM software	3.5	26.8	30.3	3.5	17.6	21.0	23.8	-8.0	High	2
Option 2 – Replace the current solution with a new CRM and a consistent customer data model (Recommended)	3.1	20.0	23.2	3.1	13.8	17.0	23.8	-1.9	Medium	1

SA Power Networks needs to replace the CRM and data model in the 2025–2030 period because:

- it maintains our existing levels of service and manages the risk from lack of support of one of our core customer systems;
- there are significant cost avoidance factors associated with replacing a CRM early in this program, avoiding technical debt that will need to be remediated, avoiding the costs and risks of maintaining multiple customer data sets and the associated overheads;
- it will allow us to support our customers through the energy transition by creating customer services efficiencies and quicker resolution of their enquiries and requests; and
- we will be able to deliver on the significant benefits of our overall Customer Technology program, ensuring long-term, cost-effective, easy-to-use customer digital services in line with customer expectations.

[4] Note: Totals presented in tables throughout this document may not exactly match the sums of individual figures due to rounding
[5] Net present value (NPV) of the proposal over 10-year cash flow period from 1 July 2025 to 30 June 2035, based on discount rate of 4.05%.
[6] The overall risk level for each option after the proposed option is implemented.
[7] The costs and NPV of option 0 (base case) have been set to zero as the costs associated with this option have been included as benefits of other options as appropriate.

3. Background

A CRM is a technology that enables an organisation to manage all their relationships with customers. The CRM stores, analyses, manages, maintains and aggregates data related to customers and their interactions in a centralised location. It is typically used to support efficient delivery of customer enquiries and requests and can be used to drive customer service improvements. The CRM is supported by an underlying data model, which in its current form is meter-centric and is more focused on the physical property attributes than the customer.

3.1 The scope of this business case

The scope of this business case is to:

- Replace the existing customer relationship management (CRM) capabilities
- Replace multiple disparate data repositories and implement a customer-centric data model
- Enable the foundations for the rest of the Customer Technology program.

Replace the existing CRM as it has been deemed end of life

Our customer service technology environment consists of a disparate set of legacy systems, including a CRM, which we use to record and manage our customer requests and interactions. The existing CRM solution capabilities that will be replaced include:

- A CRM solution
- Small bespoke legacy applications used to service customers
- Manual workarounds such as local spreadsheets

The existing CRM is a cloud-based CRM capability that has been deemed end of life and needs to be replaced to ensure services continue to be delivered cost-effectively and securely.

Replace multiple disparate customer databases and implement a customer-centric data model

The current solution includes a number of different data repositories that have been built over time in response to customer service expectations and technology limitations. Each of these separate repositories creates risks relating to data security, data currency and the source of truth for customer enquiries. Creating a single data model will enable both increased security and customer services.

Enable the foundations for the rest of the customer technology program

Replacing the CRM, associated systems and the data models is a key part of the work we need to undertake to realise the **$99.1 million** benefits we expect to receive through more efficient customer service delivery and the achievement of the other Customer Technology program business cases. A core services platform approach allows SA Power Networks to achieve a quicker implementation timeline and decrease the cost and complexity of maintaining customer services solutions in the future.

3.2 Our performance to date

SA Power Networks has observed a significant increase in the number and complexity of customer service interactions based on historic trends. The energy transition, coupled with increasing customer expectations, has contributed to the increased rate of interaction. Table 3, outlines the growth in total customer interactions across services, including a 55% average per annum volume increase in unique interactions across core services, new energy services and engagement levels on key digital channels and interfaces.

Table 3 Customer interaction growth

	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%**

The current CRM is heavily utilised by a small number of customer services users, supporting a high volume of interactions with customers daily. The system is currently used to manage data and interaction records for 860,000 customers, support 128,000 general enquiries and 2,500 complaints, and fulfil 30,000 customer service request tickets.

Current performance challenges of disparate customer services solutions include:

- The average general enquiries call time increased from 5.28 minutes in 2017 to 8.7 minutes in 2022, with after-call close-out times being higher than observed industry averages
- The inability to retain customer history and associated loss of data upon customer moving out of property results in the overwriting of 14,000 data records on a monthly basis
- There are challenges in achieving increased customer service efficiency as the telephony and existing CRM solution cannot be easily integrated
- Existing search capabilities are not fit for purpose and create additional overheads for customer service agents
- There are limited features to support common customer service capabilities, such as knowledge management, claims management and management of multi-service interactions.

These challenges result in additional overheads, decrease our ability to efficiently resolve customer queries and add to the time customers need to spend on the phone with our Contact Centre.

While the current CRM solution met SA Power Networks' needs in the early years, with regard to energy market interactions and billing, customer needs have grown. The types of customer interactions have changed over time, particularly as customers are now becoming more involved in the energy transition. The CRM component of the customer service suite of applications has been unable to keep pace with change.

Even if our existing solution was not reaching its end of life in the upcoming regulatory control period, a recent external review[8] of the CRM and its ability to meet current requirements, now and into the future, concluded that significant capability gaps exist with the solution that can only be marginally addressed with additional investment. Even with further investment, the product is still not as capable of achieving our

[8] Strategic CRM Review completed in 2023

requirements to the same level as other market-leading CRM solutions. The report concluded that, based on our customer service requirements into the future, the solution is not fit for purpose. The gaps will not be addressed by the vendor.

3.3 Drivers for change

To support the increasing levels of interaction and to meet customer expectations, SA Power Networks needs to replace our existing CRM solution and underlying customer data models while adopting a consolidated customer service platform approach.

The key drivers for the replacement of the CRM and customer data are as follows.

The CRM has been deemed end of life in the 2025–2030 period

A new version of SA Power Networks CRM product is being offered by the vendor. It is significantly different to the current CRM version and the vendor does not yet offer a viable upgrade path to the new version, nor does the new version feature parity with the existing CRM.

The current CRM has been deemed not fit for purpose

The current CRM has significant capability gaps compared to our requirements which the vendor can only address through additional solutions that will need to be integrated. The current solution is only able to deliver 30% of the long-term capability requirements, presenting a range of gaps in SA Power Networks being able to efficiently service customers[9].

Customer service demand continues to grow and cannot be efficiently met with the current solution

A more efficient service delivery of customer enquiries and requests for services is needed as the number of enquiries continues to grow, refer to Table 3 Customer interaction growth . The number of Contact Centre general enquiries is projected to continue to grow into the 2025–30 period and beyond, driven by customers reliance on electricity increasing as well as their associated need to request services from SA Power Networks. This is driving a need to invest in long-term cost-effective solutions (refer to Figure 2).

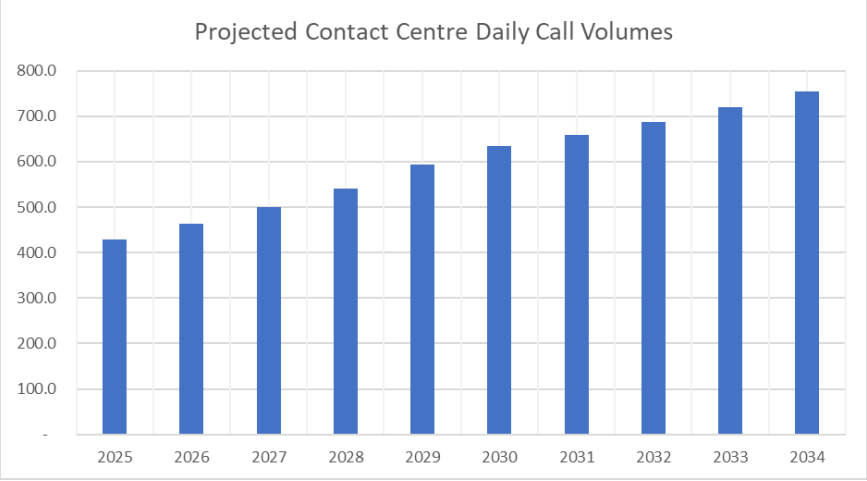


Figure 2: Projected Contact Centre daily call volume average

A new CRM can ensure organisational content management practices through the consolidation of customer interaction data and key customer-related artefacts, such as connections contracts, in a single repository, which will increase the efficiency of customer service delivery. Customer expectations for quick and efficient service delivery can be met through a modern customer services solution.

[9] Capability gap analysis was undertaken as a part of the CRM Strategy Review completed in 2023 by an external consultancy.

Poor customer data management practices need to be remediated to enable efficient customer services and prevent overwrite of 14,000 records on a monthly basis

The data model that supports the CRM was once considered efficient; however, as our levels of customer engagement and demand for digital services grow, the model is unable to effectively support this transition. The current data model is informed by market information focusing primarily on the property/ National Metering Identifier (NMI). This creates limitations in terms of understanding and being able to effectively service customers, and results in 14,000 customer records being overwritten monthly. A new CRM with an underlying customer-centric data model can deliver organisational and customer efficiency through providing a source of truth for customer data.

Multiple customer databases need to be consolidated to improve the cyber security posture

The ongoing cyber security posture must be managed through the consolidation and replacement of several customer data repositories that have evolved over time across the SA Power Networks landscape. Multiple databases present a cyber security overhead through the need to secure at least six customer databases.

A consolidated customer services platform approach will enable $99.1 million of benefits to be delivered through the Customer Technology program

A functional, modern customer services platform that encompasses a CRM, customer data model and other customer services capabilities is a key enabler to delivering a range of strategic programs in the 2025–2030 RCP. This includes programs to support the energy transition and other Customer Technology program business cases proposed in the 2025–2030 period. To deliver on our Customer Strategy[10], which was informed by the needs of customers, and realise the resulting benefits that stem from that, we need to have a core platform capable of supporting our strategy.

3.4 Industry practice

Through necessity Distribution Network Service Providers (**DNSP**) are shifting to more customer-centric models of operation, supported by market-leading customer service platform solutions that are able to deliver on their needs and support their customer engagement as the energy market undergoes a major transition.

The ability to efficiently service customers' enquiries and requests, define complex customer segments, allow the capture and storage of historical information from a variety of information sources, and record customer interactions is now commonly performed in a modern, capable customer services platform across the industry.

Vendors are responding to the demand by the utilities industry, including for DNSPs, and are increasingly providing energy and utilities customer-service-specific solutions, including an industry-specific data model and out-of-the-box functional capabilities aimed at servicing distribution network customers e.g., outage reporting, claims and complaints management.

[10] Customer Strategy 2022-2026

4. The identified need

The underlying driver for investment action to be considered in this business case is the need to contain increasing costs to provide our customer services, given expected increases in customer interactions while using a system that is not fit for purpose long term, and managing the risk of an end-of-life solution. These costs encompass managing expenses required to establish foundational capabilities utilised by other initiatives, like the Customer Technology program. The aim is to prevent accruing additional technical debt by integrating capabilities into a long-term solution.

In considering potential responses to this driver, we engaged with our customers on their desired service level outcomes, balanced against price outcomes, and considered our regulatory requirements under the National Electricity Rules (**NER**), National Electricity Law and jurisdictional regulations.

As a result of these considerations, the identified need for replacing our CRM is as follows:

- To respond to customers' concerns[11], identified through our consumer and stakeholder engagement process, regarding their explicit service level recommendations that we:
  - keep customers informed, in a timely manner, regarding changes that impact them
  - are easy to deal with and transparent across the whole interaction, from request to completion
  - enable customers to securely self-manage their information
  - provide services than are in line with equivalent businesses
  - enable self-service, where possible and viable, including being able to see a history of their interactions.
- To more cost-effectively maintain compliance with applicable regulatory obligations/requirements[12] – in this case, with specific reference to:
  - the Electricity Distribution Code, Essential Services Commission.
- To maintain the safety of our distribution network and system, in relation to the risks of harm to workers, consumers and community, through the provision of easy-to-access and clear information.
- To ensure the best long-term efficient cost for our customer and network services, through prudent automation of key processes.

[11] This is pursuant to Clause 6.5.7(c)(5A) of the NER, which requires regard to be had to the extent to which forecast expenditure seeks to address the concerns of distribution service end users identified by the distributor's engagement process.

[12] This is pursuant to Clause 6.5.7(a)(2) of the NER, which requires expenditure in order to comply with all appliable regulatory obligations or requirements associated with the provision of standard control services.

5. Comparison of options

In this section we discuss the three options considered for CRM services.

5.1 The options considered

Table 4 Summary of options considered

Option	Description
Option 0 – Continue with current CRM system (Base case)	Continue using the existing CRM system while recognising the system's performance will decline over time, presenting significant challenges, including increased effort to service customers, a decrease in the quality of service provided, increased maintenance costs and increased risks associated with a solution deemed end of life. Furthermore, significant capability gaps currently existing will not be resolved, resulting in increased service costs into the 2025–2030 period.
Alternative options	
Option 1 – Invest in additional solutions to support the existing CRM software	We will continue to invest in the existing CRM solution by implementing additional bolt-on solutions to support it. This option may temporarily extend the life of the CRM system. However, the risk associated with the solution end of life will increase, as will the associated support costs.
Option 2 – Replace the current solution with a new CRM and a consistent customer data model (Recommended)	SA Power Networks would replace the CRM and consolidate and upgrade the data model in the 2025–2030 period on a modern, consolidated customer services platform. This is the only solution that will enable us to maintain our existing systems and services at the current acceptable levels of risk and capability, secure our customer data with the appropriate levels of updates and patching, and enable the benefits of the customer program.

5.2 Options investigated but deemed non-credible

The option of deferring investment in a modern CRM system was investigated and ultimately deemed non-credible due to several critical factors and considerations.

Managing costs during rapid growth

As detailed above, we expect significant growth in the rate of customer interactions, driven by the energy transition. Cost-effective management of customer services demand requires fit-for-purpose technology that aids improved efficiency for internal staff and decreased time and effort for customers.

Inability to meet customer expectations

SA Power Networks cannot defer this investment and do nothing in response to the evolving energy environment and increasing demand for customer services. Customers expect timely and efficient service; deferring the CRM improvements would negatively impact their experience.

Foundational capability key to supporting the customer technology program

The CRM system plays a foundational role in supporting a number of programs proposed in the 2025–2030 period. Deferring its implementation would have detrimental impact on other projects, both immediately and into the future, and will result in significant levels of technical debt that would need to be addressed at a later point, incurring higher costs in the long term. The benefits of the Customer Technology program cannot be realised without investment in the CRM solution.

Managing technical debt levels

Deferral of the CRM replacement will require continued investment in the existing solution, which is no longer being invested in by the supplier. This approach would introduce more complexity and maintenance overheads, making it less cost-effective and less operationally efficient in the long term.

Deferring CRM investment is deemed non-credible due to its negative impact on customer service cost and operational efficiency. The foundational role of the CRM system and the need to meet customer expectations and growth projections make a modern CRM implementation the most viable option.

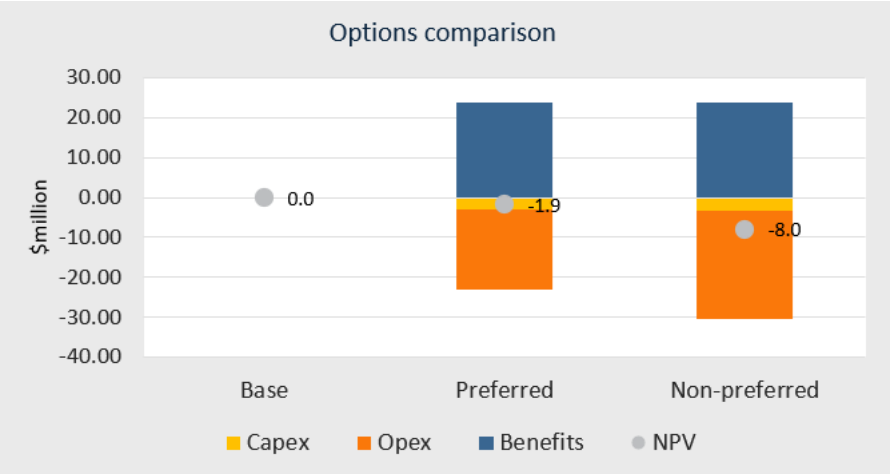
5.3 Analysis summary and recommended option

5.3.1 Options assessment results

Table 5 Costs, benefits and risks of alternative options relative to the base case over the 10-year period, $m, $ real June 2022.

	Total program costs				2025–2030 costs		Benefits[13]	NPV[14]	Risk level[15]	Ranking
Option	**Capex[16]**	**Opex[17]**	**Total**	**Capex[18]**	**Opex[19]**	**Total**				
Option 0 – Continue with existing CRM system (Base case)[20]	–	–	–	–	–	–	–	–	High	Not credible
Option 1 – Invest in additional solutions to support the existing CRM software	3.5	26.8	30.3	3.5	17.6	21.0	23.8	-8.0	High	2
Option 2 – Replace the current solution with a new CRM and a consistent customer data model (Recommended)	3.1	20.0	23.2	3.1	13.8	17.0	23.8	-1.9	Medium	1

[13] Represents the total capital and operating benefits, including any quantified risk reductions compared to the risk of Option 0 (base case), over 10-year cash flow period from 1 July 2025 to 30 June 2035 expected across the organisation as a result of implementing the proposed option.
[14] Net present value (NPV) of the proposal over 10-year cash flow period from 1 July 2025 to 30 June 2035, based on discount rate of 4.05%.
[15] The overall risk level for each option after the proposed option is implemented. Refer to Appendix C – Risk assessment for details.
[16] Represents the total capex associated with the proposed option over the 10-year cash flow period from 1 July 2025 to 30 June 2035.
[17] Represents the total opex increase associated with the proposed option above the current level of opex, over the 10-year cash flow period from 1 July 2025 to 30 June 2035.
[18] Represents the total capex associated with the proposed option over the 5-year cash flow period from 1 July 2025 to 30 June 2030.
[19] Represents the total opex increase associated with the proposed option above the current level of opex, over the 5-year cash flow period from 1 July 2025 to 30 June 2030.
[20] The costs and NPV of option 0 (base case) have been set to zero as the costs associated with this option have been included as benefits of other options as appropriate.



Assumptions

Key assumptions to note in relation to the NPV results above include:

- While Section 5.5.2 below includes projected cost increases under Option 0, the NPV of these has been assumed to be a cost-avoidance benefit of Options 1 and 2 when calculating their NPVs. This enables them to be more easily compared to a zero base for Option 0.
- It is expected that cost reductions identified will be used to offset the additional recurrent costs of new services/platform capabilities and reduce/avoid the realisation of future cost increases.
- This project is planned to be a software-as-a-service (SaaS) solution and hence, most of the costs of implementation are considered operating expenditure.
- The funding of this project adopts a portfolio approach – the Customer Technology program and other business-case benefits depend on the CRM project being realised.
- The program delivery approach assumes shared project resources across multiple projects (program manager, pool of skilled delivery Full Time Equivalent (**FTE**) including architect, business analyst, developers and testers). This 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 increase of 15-20% in costs per business case.

5.3.2 Recommended option: Option 2 - Replace the current solution with a new CRM and a consistent customer data model

SA Power Networks will make a strategic investment into its CRM, with replacement of the existing CRM, legacy associated systems and customer data models in the 2025–2030 period. The legacy CRM will be replaced with a CRM that is able to hold both customer and NMI-related views. The modern CRM will be 'evergreen'; that is, the vendor will continue to evolve and enhance the product in line with market expectations and reliably maintain the solution into the longer term. It will be able to readily integrate with customer portals and other digital channels and be available across a unified platform that enables all staff to access the information they need to answer customer enquiries or to support staff needs, for example, information about property access or dangerous residents and dogs.

This option also involves consolidation of the six customer data repositories into the CRM, which is critical to ensuring the cyber security posture of the environment is managed, reducing the likelihood of customer data breach or loss.

The replacement solution will be able to support a customer-centric model, which provides a comprehensive representation of a customer's data, including relevant information about their interactions, both current and historical, across SA Power Networks, and is tightly integrated with NMIs.

This is the only option that will enable us to deliver on our strategy, enable the benefits from other business cases to be realised, and manage risks to an acceptable level by consolidating the various customer data repositories into the CRM.

Appendix A lists the cost and benefit models for each option. Appendix B details the Software as a Service (SAAS) opex adjustments request for the preferred option. Appendix C provides the detailed risk analysis for each option.

5.4 Comparison of Options: option 0 – continue with existing CRM system

5.4.1 Description

The option to continue with the existing CRM system while acknowledging its constrained capabilities comes with significant challenges and implications for the provision of customer services into the 2025–2030 period. These challenges and implications are explored below.

End-of-life risk

The current CRM system is considered end of life; the supplier is no longer investing in this product. This poses a risk to the efficient support of customer services. As the system ages, it may become more vulnerable to operational issues.

Higher costs

Ongoing investment will be necessary to maintain the existing system and the continued provision of customer services. The current solution is only able to deliver 30% of the capability requirements, presenting a range of gaps in SA Power Networks' ability to efficiently service customers[21]. Customer service agents will continue to face overheads, including longer call-handling times and manual workarounds to compensate for gaps in functionality. Without additional investment in the platform, these gaps can only be adequately addressed through additional labour effort.

CRM capability gaps

Gaps will continue to exist that create significant customer services challenges and overheads. The existing CRM is unable to meet core customer service capabilities, including knowledge management, inbound/outbound telephony integration, and the provision a customer-centric data model.

Data management challenges

The current CRM system is based on a property-centric data model, leading to the overwrite of approximately 14,000 data records on a monthly basis. This results in the loss of historical customer interactions and creates inefficiencies in data management. The lack of historical information about previous interactions means that customers are frequently required to repeat information they have previously communicated, leading to a frustrating customer experience.

Unresolved risks

The current manual workarounds and overheads to manage customer data repositories will persist until the CRM reaches its end of life. The existing risks associated with the ageing CRM are not mitigated by this option, and it may hinder the achievement of customer service objectives. The overall cyber security posture is impacted, in response to the need for manage controls for multiple sources of customer data.

While maintaining the current CRM system with ongoing investment may provide a short-term solution, it comes with long-term challenges and risks. The decline in system performance, capability gaps, and inefficiencies in data management can impact customer service quality and operational efficiency. This approach does not align with our strategic objectives, customer service expectations, cyber security risks and the evolving needs of the South Australian community.

[21] Capability gap analysis was undertaken as a part of the CRM Strategy Review completed in 2023 by an external consultancy.

5.4.2 Costs

Table 6: Option 0 – Costs by cost type ($m real June 2022)

Cost type	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025–30	2030–31	2031–32	2032–33	2033–34	2034–35	Total 2025–35
Capex	–	–	–	–	–	–	–	–	–	–	–	–
One-off opex	0.6	–	–	–	–	0.6	–	–	–	–	–	0.6
Recurrent opex	0.1	0.3	0.6	0.9	1.2	3.2	1.2	1.2	1.2	1.2	1.2	9.3
Total	0.7	0.3	0.6	0.9	1.2	3.8	1.2	1.2	1.2	1.2	1.2	9.9

5.4.3 Risks

Table 7: Option 0 – Risk assessment summary

Risk consequence category	Risk description	Current risk level[22]
Safety – Harm to a worker, contractor, or member of the public.	Customer interactions across SA Power Networks are siloed, with no ability to access the history of customer interactions in a single place. This poses a health and safety risk for staff unknowingly encountering dangerous situations such as harmful property owners or dangerous dogs.	**High**
Customers – Failure to deliver on customer expectations.	In the current data model, customer master data is overwritten whenever new data for the NMI is received, so SA Power Networks cannot retain and manage customer history which creates customer service inefficiencies and sometimes asking customers for the same information again.	**High**
Performance and growth – Financial impact – Cash loss or earning impacts.	CRM cannot be integrated with other customer-related technologies that are core to SA Power Networks, eg, telephony, reducing our opportunity to be more efficient.	**High**
Performance and growth – Financial impact – Cash loss or earning impacts.	There is no verifiable solution roadmap for the current CRM system.	**High**
Performance and growth – Financial impact – Cash loss or earning impacts.	There is an inability to search for records and information.	**High**
Culture and workplace – Misalignment in the beliefs and behaviours of workers, management, and customers.	The CRM does not support a customer-centric model capability.	**High**
Overall risk level		**High**

[22] The level of risk post current controls (ie after considering what we currently do to mitigate the risk).

Table 8: Option 0 – Risk cost estimates by category

Risk consequence category	Risk Description	Risk cost[23]
Performance and growth – Financial impact – Cash loss or earning impacts.	Current CRM cannot be integrated with other customer-related technologies that are core to SA Power Networks, eg, telephony. This adds to the administrative burden and overhead and impacts productivity staff are required to search multiple systems and extract the same information from customers again and again	$500K – $5M
Performance and growth – Financial impact – Cash loss or earning impacts.	There is no verifiable solution roadmap for the current CRM system. The current CRM does not readily support the required capability uplift and requires significant additional spend	$500K – $5M
Performance and growth – Financial impact – Cash loss or earning impacts.	There is an inability to search for records and information. Increased resources dedicated to verifying customer records and information, reducing productivity and efficiency of teams.	$500K – $5M
Total risk cost		**$1.5M – $15M**

5.4.4 Quantified benefits

There are no quantifiable benefits from this approach.

5.4.5 Unquantified benefits

There are no identified benefits to sustaining the solution. While familiarity with the current solution may sometimes be considered a benefit, the increased resources dedicated to verifying customer records and information significantly reduces the productivity and efficiency of our teams. Familiarity cannot be considered a benefit in this instance.

5.5 Comparison of Options: Option 1 – Invest in additional solutions to support the existing CRM software

5.5.1 Description

This option involves continued investment into the existing CRM solution by adding a variety of solutions to bridge a portion of the gap that exists between the current solution capability and where we need to be.

The new version of the existing CRM that is available on the market is not at feature parity with the current version and there is no verifiable roadmap as to when they will be delivered; nor is there a viable upgrade path as yet. As a result, it is expected the evolution to meet our needs will be slow, as the vendor has a much smaller market presence in Australia and New Zealand for this product compared to other potential CRM solutions.

This option therefore requires significant investment in other solutions to support the CRM, covering a range of capabilities missing from the solution, as well as commitment of overheads required to manage those additional solutions. It must be noted that, even with the additional solutions in place, the ability to deliver fully on our customer service expectations is impeded by fundamental technology gaps in the CRM.

[23] Estimated cost of consequence(s) to SA Power Networks or its customers in an event this risk eventuates over the NPV analysis period

This solution will seek to address the customer data issues by also implementing a customer data platform (**CDP**). The CDP will contain required capabilities to deliver a customer-centric data model and avoid the deletion of customer records and support the consolidation of various customer data repositories.

Telephony integration, which is a core CRM capability, will continue to be an issue. The Contact Centre platform vendor has indicated that an integration widget for our CRM is on its roadmap; however, there is no confirmed release date. While the new CDP won't solve the telephony integration challenges, it will be available to feed relevant customer data once the integration issue is resolved.

Integration more generally will be more complex and costly to deploy in this option.

To provide the desired level of customer service and resolve matters efficiently, we need a fully functional CRM. We must consider the feasibility of continuing to invest in a product that has been deemed end of life and be confident that the investment is prudent. To this end, we did consider what value any further investment has to support a solution that is ultimately still incapable of meeting our or our customers' needs. It is clear that further investment in the existing CRM is neither prudent nor efficient, comes at high cost – $30.3 million compared to the preferred Option 2 cost $23.2 million – with limited value provided in return. For this reason, this option is not recommended.

5.5.2 Costs

Table 9: Option 1 – Costs by cost type ($m real June 2022)

Cost type	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025–30	2030–31	2031–32	2032–33	2033–34	2034–35	Total 2025–35
Capex	0.6	2.9	-	-	-	3.5	-	-	-	-	-	3.5
One-off opex	6.5	4.3	0.5	-	-	11.3	-	-	-	-	-	11.3
Recurrent opex	0.1	0.3	2.2	1.8	1.8	6.2	1.8	1.8	1.8	1.8	1.8	15.5
Total	7.2	7.5	2.7	1.8	1.8	21.0	1.8	1.8	1.8	1.8	1.8	30.3

5.5.3 Risks

Table 10: Option 1 – Risk assessment summary

Risk consequence category	Risk description	Residual risk level[24]
Safety – Harm to a worker, contractor, or member of the public.	Customer interactions across SA Power Networks are siloed, with no ability to access the history of customer interactions in a single place. This poses a health and safety risk for staff unknowingly encountering dangerous property owners.	High
Customers – Failure to deliver on customer expectations.	In the current data model, customer master data is overwritten whenever new data for the NMI is received, so SA Power Networks cannot retain and manage customer history.	Medium
Performance and growth – Financial impact – Cash loss or earning impacts.	CRM cannot be integrated with other customer-related technologies that are core to SA Power Networks, eg, telephony.	High

[24] The level of risk post current controls (ie after considering what we currently do to mitigate the risk).

Risk consequence category	Risk description	Residual risk level[24]
Performance and growth – Financial impact – Cash loss or earning impacts.	There is no verifiable solution roadmap for the current CRM system.	High
Culture and workplace – Misalignment in the beliefs and behaviours of workers, management, and customers.	The CRM does not support a customer-centric model capability.	High
Performance and growth – Financial impact – Cash loss or earning impacts.	There is an inability to search for records and information.	Medium
Overall risk level		High

Table 11: Option 1 – Risk cost estimates by category

Risk consequence category	Risk description	Risk cost[25]
Performance and growth – Financial impact – Cash loss or earning impacts.	CRM cannot be integrated with other customer-related technologies that are core to SA Power Networks, eg, telephony.	$500K – $5M
Performance and growth – Financial impact – Cash loss or earning impacts.	There is no verifiable solution roadmap for the current CRM system. The current CRM does not readily support the required capability uplift and requires significant additional spend.	$500K – $5M
Performance and growth – Financial impact – Cash loss or earning impacts.	There is an inability to search for records and information. Increased resources dedicated to verifying customer records and information, reducing productivity and efficiency of teams.	$500K – $5M
Total risk cost		**$1.5M – $15M**

5.5.4 Quantified benefits

The benefits for Option 1 are aligned with those identified in Option 2. Any quantifiable benefits associated with avoidance of an implementation cost are offset by the significant investment in overseeing the non-preferred option.

5.5.5 Unquantified benefits

The current CRM is already part of SA Power Networks' technology stack. As a result, the additional investment required to uplift capability is lower than that of a replacement solution. However, this difference in cost does not present prudent expenditure as it also delivers a much lower value to SA Power Networks customers and staff due to the remaining capability gaps, even after the additional investment.

[25] Estimated cost of consequence(s) to SA Power Networks or its customers in an event this risk eventuates over the NPV analysis period

5.6 Comparison of Options: Option 2 – Replace the current solution with a new CRM and a consistent customer data model (Recommended Option)

5.6.1 Description

SA Power Networks would make a strategic investment into a new CRM, with the replacement of the existing CRM and a change in data model in the 2025–2030 period.

The legacy CRM will be replaced with a single modern, extensible CRM that is able to hold both customer and NMI records. It will be able to readily integrate with customer portals and other digital channels and be available across a unified platform that enables all staff to access the information they need to answer customer enquiries or to support staff needs, for example, information about property access or dangerous residents and dogs.

This option also involves consolidation of customer data, which is critical to ensuring the cyber security posture of the environment is managed, reducing the likelihood of customer data breach or loss.

A consolidated customer-centric model will also provide a comprehensive representation of a customer's data, including relevant information about their interactions, both current and historical.

As the CRM chosen will readily enable integration with our existing telephony system, this option will specifically benefit from the data model change. The combination of a successful telephony integration and a customer-centric data model enables us to become more efficient in the way customer enquiries and cases are handled and resolved. These capabilities include caller identification and information about the caller, call routing, and better customer engagement as a result. Integration more broadly will be critical to leveraging the full benefits of the Customer Technology program. A modern, cloud-based SaaS solution that is 'evergreen', where new features and capabilities are regularly released, will go a long way to future-proofing our customer capabilities, reducing the likelihood of creating technical debt in the future.

This is the only option that will enable us to deliver the program in full, enable the benefits from other business cases to be realised, and manage risks to an acceptable level by consolidating the various customer data repositories into the CRM and providing a core customer services platform.

5.6.2 Costs

Table 12: Option 2 – Total cost by cost type ($m real June 2022)

Cost type	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025–30	2030–31	2031–32	2032–33	2033–34	2034–35	Total 2025–35
Capex	0.5	2.7	-	-	-	3.1	-	-	-	-	-	3.1
One-off Opex	3.7	5.1	0.5	-	-	9.4	-	-	-	-	-	9.4
Recurrent opex	0.1	0.3	1.6	1.2	1.2	4.4	1.2	1.2	1.2	1.2	1.2	10.6
Total	4.3	8.1	2.1	1.2	1.2	16.9	1.2	1.2	1.2	1.2	1.2	23.2

5.6.3 Risks

Table 13: Option 2 – Risk assessment summary

Risk consequence category	Risk description	Residual risk level[26]
Safety – Harm to a worker, contractor, or member of the public.	Customer interactions across SA Power Networks are siloed with no ability to access the history of customer interactions in a single place. This poses a health and safety risk for staff unknowingly encountering dangerous property owners	Medium
Customers – Failure to deliver on customer expectations.	In the current data model, customer master data is overwritten whenever new data for the NMI is received, so SA Power Networks cannot retain and manage customer history.	Medium
Performance and growth – Financial impact – Cash loss or earning impacts.	CRM cannot be integrated with other customer-related technologies that are core to SA Power Networks, eg, telephony.	Negligible
Performance and growth – Financial impact – Cash loss or earning impacts.	There is no verifiable solution roadmap for the current CRM system.	Negligible
Culture and workforce – Misalignment in the beliefs and behaviours of workers, management, and customers.	The CRM does not support a customer-centric model capability.	Medium
Performance and growth – Financial impact – Cash loss or earning impacts.	There is an inability to search for records and information.	Negligible
Overall risk level		Medium

5.6.4 Quantified benefits

The quantified benefits of Option 2 include:

Cost savings

- Removal of SAP's Cloud for Customer CRM solution (**C4C**) licence costs and reduction in associated FTE support ($3.7 million)

Cost avoidance

- Reduced staff time to handle calls as customer information will be easily accessible and not disjointed across various systems ($1.4 million)
- Technical debt overhead accumulated through investments across the Information Technology (IT) portfolio due to a need to implement changes in legacy solutions that would need to be reversed in a future period ($3.6 million)
- Avoided manual handling of claims and complaints and saving staff time in administration ($3.8 million)
- Reduced written query response times for staff ($0.7 million)
- Avoided increase in costs that would be incurred under the Option 0 Base case ($9.9 million)

[26] The level of risk post current controls (ie after considering what we currently do to mitigate the risk).

Customer benefit

- Reduced customer time on calls ($0.6 million)
- Reduced time for customers to submit complaints and track the status and outcome of their complaint ($0.1 million)

Table 14: Option 2 – Benefits by expenditure type ($m real June 2022)

Cost type	2025–26	2026–27	2027–28	2028–29	2029–30	Total 2025 – 30	2030–31	2031–32	2032–33	2033–34	2034–35	Total 2025–35
Cost savings	-	-	0.5	0.5	0.5	1.4	0.5	0.5	0.5	0.5	0.5	**3.7**
Cost avoidance	0.7	0.4	0.8	1.4	2.0	5.3	2.5	2.6	2.8	3.0	3.2	**19.4**
Customer benefit[27]	-	-	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	**0.7**
Risk monetisation	-	-	-	-	-	-	-	-	-	-	-	**–**
Total	0.7	0.4	1.3	1.9	2.5	6.7	3.0	3.2	3.4	3.6	3.8	**23.8**

5.6.5 Unquantified benefits

There are several benefits to be gained by strategically investing in a CRM solution and developing customer-centric model, including:

- Improved productivity, efficiency and customer experience in solving customer cases, complaints and enquiries;
- Improved data quality to communicate to customers with the most up-to-date and accurate information;
- Increased ability to provide a tailored experience and personalised communication to customers by understanding their preferences;
- Better decision-making through driving key decisions with complete and accurate customer data;
- Improved reporting capabilities to drive better decision-making and monitoring of key performance indicators or metrics;
- Improved staff safety by providing timely access to accurate information related to hazards;
- Establishment of a customer insights capability to enable a more proactive service delivery approach and continuous improvement;
- Improved cyber security posture by consolidating the number of customer databases in the current environment; and
- Enablement of future advanced customer models, such as persona and relationship maps.

[27] Distinguishing the business benefits from direct benefit to customers, calculated as Customer Value of Time, which is consistent with submissions by other DNSPs such as CitiPower, Ausgrid, and Endeavour Energy.

6. Deliverability of recommended option

6.1 Customer Technology program

This CRM project forms the key foundational part of the Customer Technology program of work. The program is comprised of an integrated set of six initiatives designed to replace or upgrade a number of our core customer systems, and to deliver the expected long-term technology capabilities needed to meet the increases in customer demand as a result of the energy transition, as well as our overall increase in network activity, and do so in a secure, cost-effective manner.

Key benefits are:

- **For our customers:** save time when interacting with us, improved customer experience, improved access to data, improved service notifications, service requests and status updates, and visibility of request status.
- **For our employees:** efficiently manage enquiries, requests, and resolution status to customers.

This program is summarised below. We expect this program will deliver significant benefits to customers.

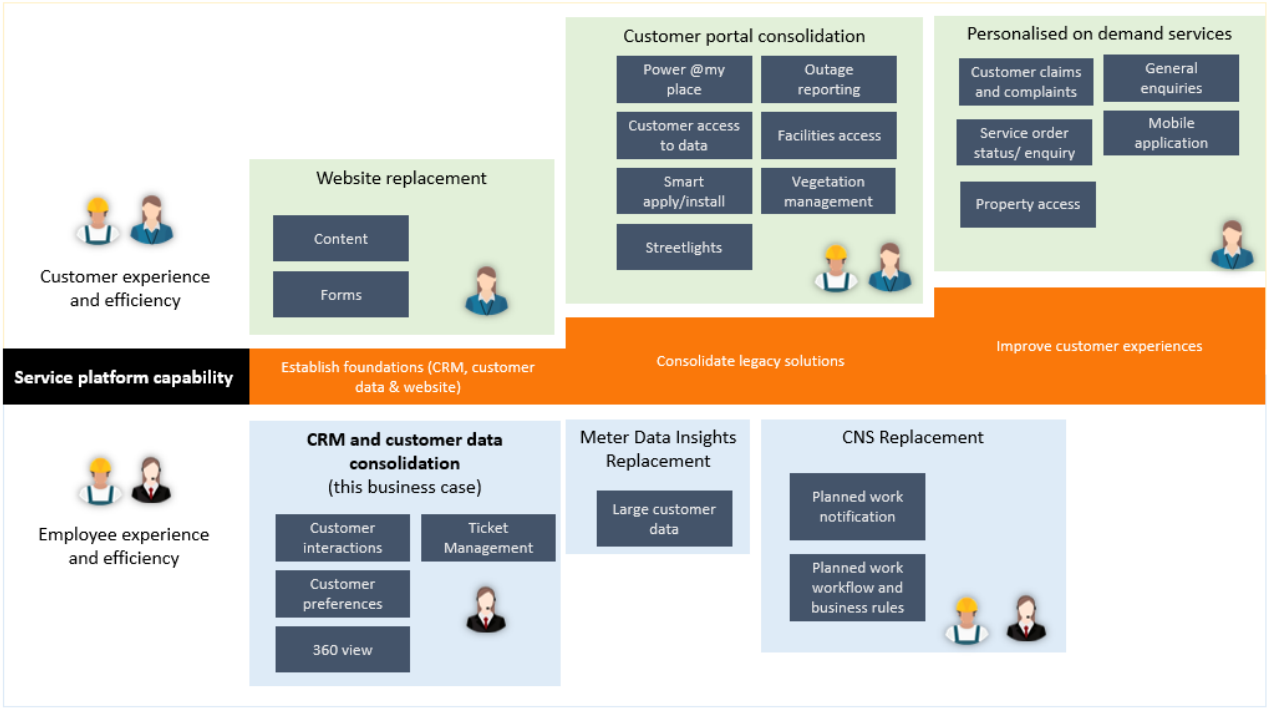


Figure 3: Proposed 2025–2030 Customer Technology Program

The program is underpinned by a number of shared core technology capabilities. A number of shared capabilities will be implemented as part of the CRM and customer data consolidation business case. The remaining initiatives will reuse and build upon a large number of these capabilities (see Figure 4).

We have built an effective program that iteratively and cost-effectively builds capability, manages risk and delivers on long-term customer requirements. Not allowing this business case therefore has a significant flow-on effect to the other initiatives. Essentially, if this business case is not allowed, we would have to add the costs of the capabilities required into those individual initiatives.

	Initiatives/Business Cases					
Customer Technology Program – Technology Capability Requirements	**Replacement Business Cases**					**New Value Business Case**
	CRM and Customer Data Consolidation (this business case)	**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 4: Customer Technology program – Initiative to capability mapping

The delivery approach assumes shared project resources across the Customer program (program manager, and pool of skilled delivery FTE, including architect, business analyst, developers and testers). This 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 costs for this replacement.

Key delivery risks relate to:

- complex integration points to existing back-office systems, including SAP Industry Standard Utilities (ISU) and SAP Enterprise Resource Planning (ERP) systems
- embedding a new platform capability within appropriate teams and ensuring appropriate change management to maximise value derived from the solution.

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

- highly skilled project delivery staff who have previous experience in delivering similar solutions at SA Power Networks
- access to highly skilled technical Subject Matter Experts (**SME**) 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 SMEs who have a strong understanding of the processes and access to a comprehensive knowledge repository that continues to be maintained.

7. How the recommended option aligns with our engagement

7.1 Alignment to customer expectations

7.1.1 Focused 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 (outlined above). Following detailed conversations, four of the six groups strongly supported Scenario 3, and two of the groups supported Scenario 2 as well as parts of Scenario 3. Hence Scenario 3 was supported by majority of the participants.

Specific comments and discussion items relevant to the CRM Replacement were:

- *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 (eg, efficiency savings and happier customers)*
- *Getting more personal with customers, provide greater levels of visibility regarding data SA Power Networks has*
- *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*
- *Being able to see history of interaction will be helpful for customers*
- *Important to integrate communication channels*
- *Important for SA Power Networks to bring customer service solutions in line with other service sectors* [28]

7.1.2 People's Panel

Given the strong support from the Focused Conversation, Scenario 2 was presented as 'for information' to the People's Panel so they had an understanding of the costs and bill impacts. The People's Panel was asked to discuss and provide input to Scenario 3. This is discussed further in the Personalised-on Demand Services Customer Technology program business case.

[28] Customer Experience and Interactions | Talking Power

8. Alignment with our vision and strategy

We provide services for 1.7 million South Australians, and this recommended replacement and consolidation supports our Customer Strategy 2022–2026. This initiative will support us to deliver our priorities to '*transform performance*' by modernising and streamlining customer-centric operations to cope with increasing demand (we have seen a **276%** increase in customer interactions over the past five years) and being '*digital by choice*', by enhancing and personalising service experiences, drawing customers to online channels and reducing reliance on our higher cost-to-serve customer interfaces such as telephone. This initiative will specifically support providing consistent and secure experiences across our contact channels, so we can provide customers with choice in how they interact with us. In addition, we can ensure the equity of access and experience for all our customers.

We understand the future of energy across Australia is progressing at an extraordinary rate. We are planning ahead for what this world of new technologies, changed community expectations and innovative energy services will hold, evidenced by our Customer Strategy[29], as summarised in Figure 5, below.

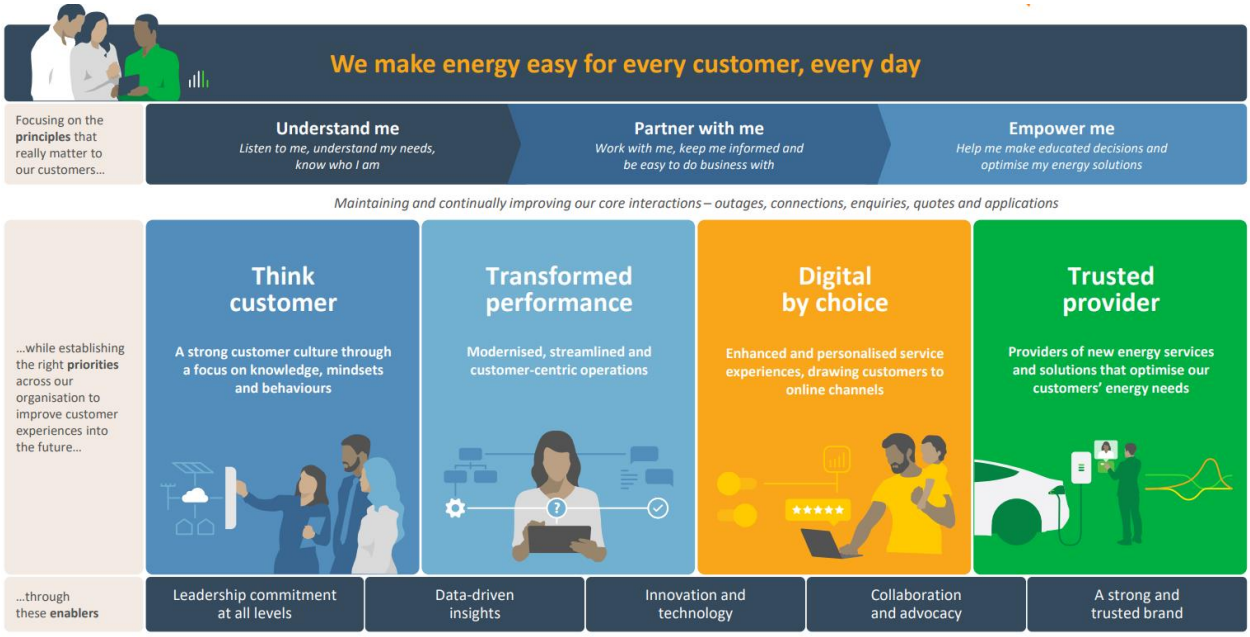


Figure 5: Customer Strategy 2022–2026 on a page

Through our Customer Charter[30], we have made the commitment to our customers that "*we will keep you informed and be easy to deal with*" and that '*we will make it easy for you to contact us when and how you want to…'*. This strategic focus involves creating a customer-centric experience by placing customers at the core of interactions, utilising CRM for a unified customer model and data source. This approach allows SA Power Networks to understand customer context, tailoring experiences based on attributes like previous interactions. We will be able to ensure a consistent user experience across all platforms, facilitated by the CRM's customer-centric model. Rationalization and modernisation will streamline external-facing portals and pages, reducing technical diversity and enhancing the user experience with modern technologies. Additionally, the CRM serves as a foundation for generating analytics and insights, leveraging data on channels, interactions, and user profiles to continually improve the overall user experience.

[29] Customer Strategy 2022–2026

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

9. Reasonableness of cost and benefit estimates

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, which are then used to plan and cost the project. (Refer Table 15).

Table 15: 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 and POCs	Feasibility, innovation and POCs
Phase 3 – Develop and plan	Plan
	Requirements
	Business case
	Vendor selection
Phase 4 – Implement – design and architecture	Implement – design and architecture
Phase 5 – Implement – build and test	Software licensing (12-month upfront purchase)
	Hardware infrastructure changes
	Client device purchases
	Development
	Configuration
	Integration
	Data conversion and migration
	Testing
Phase 6 – Implement – deploy	Training delivery
	Training materials and preparation
	Warranty
	Change management
	SME backfill

The nature of each project was flagged as to whether it was to be based on a software-as-a-service (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 (eg, project manager, architect, developer, tester etc.) was estimated based on SA Power Networks staff and our external consultants' experience of similar past projects in SA Power Networks and at other organisations. This effort was split according to our standard internal staff/external services mix of 20% internal staff and 80% external services, and costed using our 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[31]. 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

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

initially calculated bottom-up and then validated/refined with top-down analysis. Cost worksheets are included as an attachment.

9.1 Benefit estimates

An extensive and iterative process involving business and IT representatives was undertaken to define a set of reasonable benefits for this project. A summary of the process undertaken, and the key benefit types identified, is shown in section 9.1.1.

This process aligns with our Value Framework and our ICT forecasting methodology. The use of factual historical data and future forecasts derived, where possible, from external sources, ensures an industry best-practice approach that meets Australian Energy Regulator (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, to ensure the robustness of the calculations.

9.1.1 Benefit estimation process overview

Avoiding increases in costs incurred under Option 0 – BAU

- Estimates were made as to the projected increase in relevant costs under a Business as usual (**BAU**) scenario (ie, 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 (Refer 5.3.1). 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.
- While 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 (ABS). (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 and 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 (eg, AEMO-projected Electrical Vehicle (**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. The growth factors used for this particular business case are summarised in Section 10, below.

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 achieving those benefits.

10. Reasonableness of input assumptions

The following growth/trend assumptions have been used in developing the costs and benefits for this project.

Table 16: Key input assumptions and their impacts

Assumption	Source	Impact
Growth in Contact Centre calls related to unplanned outages.	Annualised compound growth of such calls from 2017 to 2022 based on actual call centre statistics and projected to continue.	Staff and customer time spent on calls to the Contact Centre.
Growth in Contact Centre calls related to planned outages.	Planned annual increases in value of relevant network maintenance activity as a proxy for switching events that result in the need for notifying customers of outages.	
Growth in Contact Centre calls related to general enquiries and other matters.	Estimate by external consultants and business representatives.	
Growth in complaint calls to Contact Centre.	Historical annual increase over past seven years projected forward.	Administration time to resolve complaints.
Growth in written enquiries to the Contact Centre.	Calculated straight line trend of actual enquiries received from Q1 2021–22 to Q3 2022–23.	Staff and customer time spent on writing and responding to written enquiries to the Contact Centre.

These are considered the best available sources for each of the above assumptions and therefore represent a reasonable basis from which to calculate the cost increases that will be avoided under Option 1 and 2.

Other inputs to the benefit calculations are documented in Section 9, above, and in the benefit model.

11. Scenario and sensitivity analysis

The following scenarios were adopted or tested to analyse the sensitivity of key forecast inputs.

Table 17: Key sensitivity scenarios tested and the results

Scenario	Source	Test result
20% growth and decline in Contact Centre calls based on: • Increased work on the network and associated customer interaction rates • Unplanned outages based on severe weather events • Energy transition factors, including customer energy resource adoption demanding higher and more complex engagement with customers	Annual compound growth of such calls from 2017 to 2022 based on actual call centre statistics and historic call volumes and lengths, with average handle times and hold times from the last five years (2017–2022). Projected increase in customer uptake of energy resources based on AEMO's 2022 Forecasting Assumptions Update. SA Power Networks historic call data for customer energy resource related enquiries.	The upper sensitivity scenario showed $22.9 million in quantified benefits and the lower sensitivity scenario yields $19.9 million in quantified benefits. The testing demonstrated that there isn't a significant impact to the benefits. The benefits remain significantly higher than the cost to execute the program under the recommended option.

The impact of replacing ageing network assets was factored into calculations, projecting the planned and unplanned outages that will cause an increased volume of calls to the Contact Centre. The increased workload in the Contact Centre has also been modelled based on recent years with severe weather events exacerbating the number of interactions with customers. The CRM replacement will benefit customers and staff by saving both parties time from calls, as customer information will be readily available to agents and up to date, reducing the likelihood of inaccurate customer records that needs to be altered by staff or customers. Hence, the CRM will assist in resolving calls and administering complaints, reflected as time saved and opex avoidance in the cost-and-benefits model.

Electric vehicle adoption numbers used in benefits modelling are based on the AEMO's 2022 Forecasting Assumptions Update[32], where the Step Change scenario was adopted with 45% average yearly growth of the number of EVs between 2025 and 2035. The Slow Change scenario from AEMO was tested and yielded a slightly lower benefits outcome, with 41% average yearly growth of the number of EVs between 2025 and 2035. Consequently, in a Slow Change scenario, there would be a lesser volume of Contact Centre calls and subsequent customer time saved with service-order enquiries relating to installation of chargers and the connections process around EV ownership.

The scenario adopted also considers the energy transition, as Flexible Exports and customer energy resource adoption will demand a higher and more complex level of engagement with customers, which the CRM replacement will help address with its ability to better track customer details and history.

[32] 2022 Forecasting Assumptions Update

A. Appendix A – Cost models

Option 0:

Customer Technology Program estimate – No change.xlsm

Option 1:

Customer Technology Program estimate – Preferred.xlsm

Option 2:

Customer Technology Program estimate – Non-Preferred.xlsm

B. Appendix B - 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 (this business case)	**3.7**	**5.1**	**0.5**	**-**	**-**	**9.4**
	New Personalised on Demand Services	-	-	-	1.4	6.0	7.4
	Total Customer Technology Program 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 CRM Replacement and Data Consolidation is switching from capex to opex as these products are more readily offered as SaaS solutions.
Request	A base-year opex adjustment of $9.4 million as a component of the overall Customer Technology Program adjustment of $30.3 million.

C. Appendix C – Risk assessment

ID	Risk scenario	Consequence description	Consequence category	Current risk (Option 0)			Residual risk (Option 1)			Residual risk (Option 2)		
				Consequence	Likelihood	Risk level	Consequence	Likelihood	Risk Level	Consequence	Likelihood	Risk level
1	Customer interactions across SA Power Networks are siloed into the various 'personas' they interact through, with no ability to access the history of customer interactions in a single place.	Increased resources dedicated to verifying customer records and information, reducing productivity and efficiency of teams.	**Performance and growth** – Financial impact – Cash loss or earning impacts.	2	5	High	2	5	High	2	1	Negligible
		SA Power Networks cannot make informed decisions or provide suitable advice in giving our customers what they need to support energy transition, resulting in customer dissatisfaction.	**Customers** – Failure to deliver on customer expectations.	4	4	High	4	5	High	4	1	Low
		Staff safety is compromised, resulting from lack of access to accurate information related to hazards etc.	**Safety** – Harm to a worker, contractor, or member of the public.	5	3	High	5	3	High	5	1	Medium
2	In the current data model, customer master data is overwritten whenever new data for the NMI is received, so SA Power Networks cannot retain and manage customer history.	Increased resources dedicated to verifying customer records and information, reducing productivity and efficiency of teams.	**Performance and growth –** Financial impact – Cash loss or earning impacts.	2	5	High	2	4	Medium	2	1	Negligible
		SA Power Networks cannot make informed decisions or provide suitable advice in giving our	**Customers** – Failure to deliver on customer expectations.	4	4	High	4	4	High	4	1	Low

		customers what they need to support energy transition, resulting in customer dissatisfaction.										
		Staff safety is compromised from lack of access to accurate information related to hazards, etc.	**Safety** – Harm to a worker, contractor, or member of the public.	5	3	High	5	3	High	5	1	Medium
3	CRM cannot be integrated with other customer-related technologies that are core to SA Power Networks, eg, telephony.	SA Power Networks cannot leverage the full benefit of the customer strategy or future-proof its capabilities, increasing the likelihood of creating technical debt in the future.	**Performance and growth –** Financial impact – Cash loss or earning impacts.	2	5	High	2	5	High	2	1	Negligible
4	There is no verifiable solution roadmap for the current CRM system.	The current CRM does not readily support the required capability uplift and requires significant additional spend.	**Performance and growth –** Financial impact – Cash loss or earning impacts.	2	4	High	2	4	Medium	2	1	Negligible
5	The CRM does not support a customer-centric model capability.	The CRM solution will not be able to align with SA Power Networks' transformation to a customer-centric organisation, in line with the energy transition.	**Culture and workplace** – Misalignment in the beliefs and behaviours of workers, management, and customers.	4	4	High	4	4	High	5	1	Medium
6	There is an inability to search for records and information.	Increased resources dedicated to verifying customer records and information, reducing productivity and efficiency of teams.	**Performance and growth –** Financial impact – Cash loss or earning impacts.	2	5	High	2	4	Medium	2	1	Negligible
			Overall risk level[33]			High			High			Medium

[33] For each option, the overall risk level is the highest of the individual risk levels.