Supporting document 5.27

Ring-fencing Compliance IT Solution Business Case Addendum

2020-25 Revised Regulatory Proposal

10 December 2019

SA Power Networks

5.27 Ring-fencing Compliance: IT Solution Business Case: Addendum Dec 2019

IT revised regulatory proposal for the 2020 to 2025 regulatory control period

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1. Shortened Forms

AER	*Australian Energy Regulator*
CAM	*Cost Allocation Method*
capex	*capital expenditure*
CCP14	*AER's Consumer Challenge Panel 14*
DNSP	*Distribution Network Service Provider*
Draft Decision	*AER, Draft Decision—SA Power Networks Distribution Determination 2020 to 2025*
ICT	*Information and Communications Technology*
opex	*operating expenditure*
original business case	*SA Power Networks 2020-25 Regulatory Proposal Supporting document 5.40 Ring-Fencing Compliance: IT Solution Business Case*
NEL	*National Electricity Law*
NER	*National Electricity Rules*
NPV	*Net Present Value*
RAB	*Regulated Asset Base*
RCP	*Regulatory Control Period*
SAG	*AER, Better Regulation | Shared Asset Guidelines*
SAPN	*SA Power Networks*

2. Executive summary

This is an addendum to our 'Ring-Fencing Compliance: IT Solution Business Case' (**original business case**)[1] contained in our original Regulatory Proposal for the 2020-25 Regulatory Control Period (**RCP**) submitted to the Australian Energy Regulator (**AER**) in January 2019. The original business case should be read for further background and detail.

This addendum amends and further explains SA Power Networks' (**SAPN**) analysis in response to matters raised by the AER in its Draft Decision—SA Power Networks Distribution Determination 2020 to 2025 (**Draft Decision**), and matters raised by our customers and stakeholders in their feedback to the AER and via our own engagement processes.

In summary:

- Our customers currently benefit from our Information and Communications Technology (**ICT**) assets being shared with our affiliate company, Enerven—principally because Enerven contribute $13.1m (Dec $2017) over the RCP toward SAPN's fixed / unavoidable ICT costs[2].
- The business case is driven by a need to comply with regulatory obligations by way of the AER's Ring-Fencing Guideline—as compliance action is required, compliance options assessed under this business case are accordingly all of net-cost (negative Net Present Value, **NPV**).
- New expenditure is recommended, primarily capital expenditure (**capex**), of **$3.8 m** (Dec $2017) in total over the 2020-25 RCP to ensure compliance with the Ring-Fencing Guideline by implementing ICT system changes—Option 1 in this business case.
    - SAPN's current approach to Ring-Fencing compliance (the 'base-case') is not a credible option to ensure compliance over the 2020-25 RCP and new / further action is required.
    - This addendum now formally compares the costs and benefits of our originally recommended option (option 1) against an additional option, in response to AER and stakeholder feedback.
    - Our recommended option (option 1) is shown to be the least cost means of complying with the Ring-Fencing Guideline and is in customers' interests.

[1] SAPN, *2020-25 Regulatory Proposal: Supporting Document 5.40—Ring-Fencing Compliance: IT Solution Business Case*, January 2019.

[2] Enerven also contribute to a revenue reduction of $1.9m (Dec $2020) for the 2020-25 RCP for the use of ICT Assets under the SAG

3. Background

3.1 Our original proposal

The 'Ring-fencing compliance: IT Solution business case' in our original Regulatory Proposal aimed to ensure compliance with regulation in the least cost means for customers of SAPN's regulated services:

- There is an 'identified need' to take further action to comply with the Ring-Fencing Guideline over the 2020-25 RCP. This is noting that:
  - The Ring-Fencing Guideline (1 January 2018) required formal separations between SAPN and affiliates providing unregulated and non-distribution services. We undertook significant compliance work, including establishing a legally separate affiliate (Enerven) to supply unregulated non-distribution services previously provided by SAPN.
  - The Ring-Fencing Guideline works together with the AER Shared Asset Guidelines (**SAG**) which encourage SAPN as an electricity Distribution Network Service Provider (**DNSP**) to share its assets that provide regulated monopoly services[3] for other services, subject to this being efficient and not prejudicing monopoly service provision.[4] Consistent with these provisions, SAPN has allowed Enerven to share in the use of SAPN ICT assets, since Enerven was established.
  - To comply with cost separation requirements in the Ring-Fencing Guideline which prevent cross-subsidisation of unregulated services by regulated services, ICT costs were allocated between Enerven and SAPN in accordance with the AER approved Cost Allocation Method (**CAM**). Further, to comply with the SAG, SAPN's revenues for regulated monopoly services (Standard Control Services) were reduced to account for revenue earned by Enerven via its use of SAPN ICT assets.[5]
  - To comply with information protection requirements in the Ring-Fencing Guideline which prevent Enerven gaining unfair advantages over competitors, SAPN implemented primarily manual-based controls. This was a prudent interim approach given the scope of compliance actions required within the short timeframe available.[6] However, the AER's 2018 Ring-Fencing Compliance Audit recommended stronger controls be considered, noting that SAPN's manual-based compliance approaches may be non-compliant, by inadequately preventing Enerven's access to SAPN information.
- Given the identified need for further compliance action, our original business case recommended a single option (option 1)—implement new technology to improve information access controls and provide greater legal and accounting separation between SAPN and Enerven. This option had a forecast capital cost of **$3.8m**[7] (Dec $2017) over the 2020-25 RCP, in order to:
  - set up a new company code in our enterprise resource planning system to segregate regulated and unregulated services; and
  - implement more robust system-based information access controls for SAP and all ICT applications that contain SAPN confidential information.

[3] NER 6.4.4 (c)(1). Specifically, this pertains to services classified by the AER as Standard Control Services.

[4] AER, *Electricity distribution ring-fencing guideline explanatory statement*, November 2016, p.15.

[5] AER, *Better Regulation – Shared Asset Guideline*, November 2013.

[6] Unlike some other DNSPs, prior to the introduction of the Ring-Fencing Guideline SAPN did not already have an established legally separated affiliate company with its own branding etc.

[7] This project required new opex of $92k and resulted in a net opex reduction of $228k in total over the 2020-25 RCP.

3.2 AER draft decision and stakeholder views

The AER did not include any costs for Ring-Fencing compliance in our forecast capital expenditure allowance for the 2020-25 RCP, citing insufficient information on the efficiency of our proposed expenditure. In addition, submissions provided to the AER by stakeholders (eg Energy Consumers Australia[8]) requested that the AER review our business case and questioned why South Australian customers should pay for the expenditure.

Table 1 summarises the views of the AER and stakeholders and how this addendum has responded.

Table 1: Considerations in the AER's draft decision for the 2020-25 distribution determination

AER considerations[9]	**SAPN response**
SAPN's current manual-based approach may be non-compliant: *SA Power Networks' unregulated related entity, Enerven, pays fees to share the use of SA Power Networks' ICT assets. Our compliance report found that this may allow Enerven staff to access information that would breach the Ring-Fencing Guideline. SA Power Networks has proposed an IT solution, of a total value of $4 million, to ensure compliance with the Guideline.*	▪ We agree and further explain why compliance action is needed (section 4.4.2). ▪ Our recommended compliance option remains as per our original business case—Option 1: ICT systems-based compliance (section 4.5).
There are other options to ensure compliance that need considering: *SA Power Networks could ensure compliance with the Ring-Fencing Guideline by excluding Enerven from use of its ICT assets, at zero capex cost. This would forgo an amount of Shared Asset Unregulated Revenue that Enerven currently pays SA Power Networks to use these assets. However, SA Power Networks has not performed NPV analysis to establish that the program is in the interests of consumers based on this amount, compared to its capex costs. For this reason, we agree with the SA Government that capex costs for this project should not be added to the regulatory asset base (**RAB**). SA Power Networks also has the option to 'self-fund' this project to recover any revenue received from Enerven that is not shared with regulated customers.* SAPN has not shown that its recommended option (option 1) is the lowest cost compliance option: *SA Power Networks has not established that this program is a lower cost means of complying with the Ring-Fencing Guideline than excluding Enerven from its shared ICT systems, so we have not included it in our substitute forecast*	▪ Our original business case inadequately explained why our recommended option 1 is the least cost means of ensuring Ring-Fencing compliance in 2020-25. ▪ Our addendum includes an additional compliance option, 'option 2—exclude Enerven from shared use of SAPN ICT assets' to show why this option would increase costs to customers for Ring-Fencing compliance (section 4.4.4). We also explain why customers benefit from Enerven's shared use of SAPN ICT assets (section 4.3). ▪ Our addendum explains why 'self-fund' is inconsistent with the National Electricity Law, National Electricity Rules and is otherwise not a feasible option (section 4.4.5).
Stakeholder views	**SAPN response**
Unclear why the proposed expenditure is in customers' interests: *Why should this expenditure be paid for by SA Consumers and added to the* (SAPN)'s *Regulated Asset Base.*[10]	▪ Our addendum explains why our recommended option 1 is the least cost Ring-Fencing compliance option (section 4.5).

[8] ECA, Submission on SA Power Networks Regulatory Proposal 2020-25, 16 May 2019. Accessible on: [https://www.aer.gov.au].

[9] AER, *Draft Decision—SAPN Distribution Determination 2020 to 2025: Attachment 5 Capital Expenditure*, October 2019, p.5-73

[10] SA Minister for Energy and Mining, *Submission on SA Power Networks Regulatory Proposal 2020-25*, 16 May 2019, p.2. Accessible on: [https://www.aer.gov.au]

4. Revised proposal

4.1 Our further consultation with stakeholders

We engaged further with our customers and stakeholders since the AER draft decision, including hosting a workshop on 21 October 2019 with our Customer Consultative Panel and the AER's Consumer Challenge Panel 14 (**CCP14**):

- stakeholders reiterated their queries as to why customers of SAPN's regulated services should pay for the costs of Ring-Fencing compliance proposed in our original business case (ie option 1);
- we clarified that the Ring-Fencing Guidelines imposed obligations on SAPN; and
- we explained why the alternative option proposed in the AER Draft Decision of excluding Enerven from sharing in the use of SAPN ICT assets would increase costs to customers of SAPN's regulated services.

This addendum further clarifies these matters.

4.2 Revisions to our original business case

This addendum makes the following key changes to the original business case in order to address the AER Draft Decision and stakeholder feedback:

- further explanation as to why, under our current arrangements, customers of SAPN's regulated services receive benefits via lower costs, arising from Enerven's shared use of SAPN ICT assets;
- formal consideration of the option of excluding Enerven from shared use of SAPN's ICT assets, as option 2 to our cost benefit analysis; and
- explanation as to why 'self-fund' is inconsistent with the regulatory framework and not a feasible option for Ring-Fencing compliance.

4.3 How customers benefit from current arrangements

We inadequately explained why customers of regulated services benefit from our current arrangements whereby Enerven shares the use of SAPN ICT assets. The cost benefit analysis in this addendum now shows these current benefits as costs that would arise to customers under option 2 (ie negative benefits relative to current arrangements).

To further explain the context of our current arrangements:

1. <u>Customers of regulated services do not pay Enerven's ICT costs because costs are properly allocated:</u>
    - SAPN applies cost allocation according to the AER approved CAM. We identify the proportion of SAPN's ICT corporate costs that Enerven should contribute to and allocate these costs to Enerven in accordance with the CAM.
    - ICT corporate cost allocation is derived from an extract of operating ICT payments / costs incurred by SAPN in a financial year in order to support and maintain SAPN's ICT systems. These include payments for ICT Hardware, software and services from external providers[11].
    - ICT costs incurred are categorised into those pertaining solely to SAPN's management of its network, and those pertaining to ICT applications that are shared with Enerven. Costs of shared ICT applications are then apportioned between SAPN and Enerven on the basis of the number

[11] Capex costs by SAPN to deliver new capability which is then shared by Enerven are recovered through the CAM and the SAG.

of SAP User licences that Enerven hold as a percentage of total User licences.[12] Costs of shared ICT applications can vary marginally from year to year[13].

- Costs of ICT applications used solely by Enerven are directly borne by Enerven[14]. Further, ICT costs that are variable and driven by Enerven's use of ICT are directly borne by Enerven.
- Enerven were allocated $4.7m in 2017/18 and $4.3m in 2018/19.[15]

2. <u>Customers of regulated services benefit because Enerven financially contribute to SAPN's fixed / unavoidable ICT costs:</u>
   - SAPN categorises costs of ICT applications that are shared with Enerven into those that are:
     - Fixed—typically licence and maintenance fees for an ICT product or service;
     - Variable—typically based on the number of Users of a product or service; and
     - Both—costs with a fixed base but with a supplementary cost driven by user licence numbers.
   - To determine which SAPN ICT costs are fixed / unavoidable and would therefore be incurred by SAPN and customers of regulated services even if Enerven ceased to use of SAPN ICT assets, we:
     - Used an extract of all ICT payments made in a financial year to support and maintain SAPN's ICT assets, including payments for ICT hardware, software and services from external providers. We identified the fixed, variable and percentage of fixed costs in payments that are both fixed and variable.
     - We have used the Enerven allocated costs for 2018/19 as it is the most recently completed regulatory year and represents the most up to date data used for the audited RIN's.
     - In 2018/19, 62 percent of ICT costs of shared applications are fixed. The percentage of SAPN's fixed ICT costs that Enerven contribute toward is circa $2.6m per annum (Dec $2017).[16]
3. <u>Customers of regulated services benefit from reductions to regulated revenues via the SAG</u>
   - SAPN applies the SAG to identify the portion of unregulated revenue obtained from Enerven's use of SAPN ICT assets. The SAG requires 10 percent of revenue earned from Enerven's shared use of SAPN regulated assets to be passed on as benefits to customers of regulated services via a regulated service revenue reduction (Standard Control Services).
   - SAPN proposed a reduction in regulated service revenues of $6.3m (Dec $2020) in total for the 2020-25 RCP, which was accepted by the AER in its Draft Decision.[17] Within this revenue reduction, $1.9m (Dec $2020) in total for the 2020-25 RCP or $388k per annum (Dec $2020) pertained to Enerven's shared use of SAPN ICT assets.

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12 Users and User licences refer to the number of rights granted to staff or groups of staff to use a software application.

13 Minor year on year variations may occur due to the timing of payments for ICT contracts (most contracts are paid yearly, however some are paid for every two years or even every 4 years) and to the number of additional contracts or decommissioned contracts during the year.

14 Enerven are responsible for mobile computing and permanent ICT hardware at their properties.

15 Lower allocation to Enerven in 2018/19 is due to lower overall ICT costs.

16 This is based on the 2018/19 cost allocation and corresponding 62 percent of fixed / unavoidable costs. Note, there are two years of ring-fencing cost allocation data. The 2017/18 fixed/unavoidable cost percentage is consistent with 2018/19.

17 AER, *Draft Decision for SA Power Networks Distribution Determination 2020 to 2025, Attachment 1—Annual revenue requirement*, October 2019, pp.1-13.

4.4 Options consideration

4.4.1 The identified need

The purpose of our business case remains unchanged from our original proposal. To avoid doubt:

- this is a compliance driven business case, and action further to our current approaches to Ring-Fencing compliance is required; and
- our need is to consider the least cost means for customers of regulated services of ensuring compliance with the Ring-Fencing Guideline over the 2020-25 RCP.

4.4.2 The base-case—manual compliance

The base-case to our options analysis is our current Ring-Fencing compliance method, which as detailed in our original business case, involves using manual processes and controls to:

- calculate the financial and regulatory accounts for SAPN and Enerven; and
- restrict user access to ICT systems that contain confidential information.

The base-case is presented in our cost benefit analysis at zero cost,[18] with costs and benefits of the two credible compliance options assessed relative to this base-case. The driver for considering alternative options for Ring-Fencing compliance is that that our <u>base-case is not a credible option for ensuring compliance over the 2020-25 RCP</u>, noting that:

- Manual controls were initially chosen as a prudent interim measure at the time Ring-Fencing was introduced given the magnitude of new compliance tasks required.
- It is now evident that there is a need for more robust and system-based information access controls and audit reporting for all ICT applications containing confidential information, noting that:
  - The 2018[19] and 2019[20] external audits of our Ring-Fencing approaches both indicated that manual controls are insufficiently robust to ensure ongoing compliance with the Ring-Fencing Guideline.[21]
  - The 2018 audit identified that there is a risk that our current controls around protection of confidential information will not prevent Enerven staff access to confidential information:

    "notwithstanding a number of mitigating controls…there is a risk that the controls that rely on the list of controlled applications will not operate correctly to prevent Enerven staff from accessing confidential information."
  - The AER's draft decision on the Distribution Determination for 2020-25 noted that:

    "Our compliance report found that this [SAPN's current manual procedures] *may allow Enerven staff to access information that would breach the Ring-Fencing Guideline".*
- Our 2019 audit reiterated that there is a risk that Enerven staff continue to have unrestricted access to SAP systems that contain confidential information, and recommended that SAPN:

  "Implement formal access restrictions in SAP by establishing a separate company code; and

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18 This does not imply the base-case has no inherent financial benefits and costs. To the contrary, operating expenditure (opex) is currently incurred in applying our current manual compliance method. Further, as our current compliance method maintains Enerven's shared use of SAPN's ICT assets, the benefits to customers explained in section 4.3 are implicit in the base-case. These costs and benefits appear in options 1 and 2 because these are assessed relative to the base-case.

19 Deloitte, *SA Power Networks Ring-Fencing Compliance Report 30th Oct 2018*

20 Deloitte, *SA Power Networks Ring-Fencing Guideline Compliance Report 30 June 2019*

21 The AER Ring-Fencing Guideline requires that DNSPs conduct annual compliance reports accompanied by an assessment of compliance by a suitably qualified independent authority.

Undertake regular monitoring of access to confidential applications in SAP for Ring-Fencing compliance.”

4.4.3 Option 1—ICT systems-based compliance

This option remains unchanged from our original business case and involves:

- setting up a new company code in SAP to separate SAPN’s regulated services from Enerven; and
- implement more robust system-based information access controls for SAP and all critical applications that contain SAPN’s confidential information.

Table 2: Summary of costs and benefits of option 1 relative to base-case

Total costs 2020-25 ($3.8m (Dec $2017))	**Total benefits 2020-25 ($256k (Dec $2017))**
▪ Capex: $3.8m is required to implement changes within our ICT systems. ▪ Opex: $92k is required for licensing of software required to implement the changes in our ICT systems	Opex: would reduce by $256k, being the savings from ceasing manual compliance (base-case)
Deliverability considerations	
This option is scheduled in order to leverage the pre-project planning and analysis activities of our separately proposed SAP S4 upgrade project, due to the technical and organisational change aspects of both projects.[22]	

The NPV for Option 1 is **-$3.5m** (Dec $2017).

4.4.4 Option 2—Exclude Enerven from sharing use of SAPN ICT assets

This option considers excluding Enerven from sharing in the use of SAPN ICT assets:

- Enerven would pay to create its own ICT systems and pay for costs to extract any data that they are entitled to extract from SAPN ICT systems as belonging to Enerven.
- The most significant negative impact on customers of SAPN’s regulated services is that they would cease to benefit from current arrangements whereby Enerven shares in the use of SAPN ICT assets. That is, costs to customers of regulated services would increase because:
  1. Enerven would cease to financially contribute toward SAPN’s fixed / unavoidable ICT costs; and
  2. regulated revenue reductions arising from the application of the SAG would cease.
- Customers of regulated services would also face additional costs, as we expect capex would be needed on assurance processes following Enerven’s removal from SAPN ICT systems. This relates to:
  1. master data cleansing—some applications hold data for SAPN and Enerven in a single master data repository or in associated drop-down lists, and Enerven master data would need to be inactivated to prevent inadvertent entries;
  2. updates to reporting to exclude Enerven—corporate reports that hold both SAPN and Enerven information (eg cost centre listings, unregulated activity reports) need changing, with data removed so that incorrect postings are not inadvertently made to previous Enerven cost collectors;
  3. assurance auditing—ensuring that any separation has not affected SAPN’s systems, processes and data and that all ICT functions remain secure and meet all compliance obligations.[23]

[22] Note that this project is not dependent on the SAP S4 upgrade project.
[23] Comprises regression testing a sample of SAPN critical distribution processes and security audit of systems and access controls.

Table 3: Summary of costs and benefits of option 2 relative to base-case

Total costs/revenue reduction 2020-25 ($15.3m (Dec $2017))	Total benefits 2020-25 ($256k (Dec $2017))
▪ Capex: $302k in new capex for assurance processes ▪ Opex: increase in regulated costs of $13.1m arising from removal of Enerven contributions to fixed SAPN ICT costs ▪ Revenue: reduction in the shared asset revenue adjustment of $1.9m for no longer using regulated ICT systems to deliver unregulated services.	Opex: would reduce by $256k, being the savings from ceasing manual compliance (the base-case)
Deliverability considerations	
Requires support of SAPN technical resources to remove access to ICT systems. This work would need to occur in the same time-period as proposed for option 1, ie prior to our SAP S/4 upgrade (separately proposed).	

The NPV for Option 2 is **-$14.1m** (Dec $2017).

4.4.5 Other considerations

The AER draft decision suggested that SAPN could opt to 'self-fund' option 1 rather than including it in the forecast expenditures for 2020-25.[24] We do not consider that this would be an appropriate option and instead consider that we are entitled to recover our costs of compliance with the Ring-Fencing Guideline under the National Electricity Law (**NEL**)[25] and National Electricity Rules (**NER**) made under the NEL.

We consider this to be the case because of the following:

- Under the revenue and pricing principles in the NEL, SAPN is to be provided with a reasonable opportunity to recover at least its efficient costs of providing (regulated) direct control network services and complying with regulatory obligations.[26] Complying with the Ring-Fencing Guideline is one of SAPN's regulatory obligations.[27]
- The NER require SAPN to propose forecast opex and capex for a RCP that is required to achieve the opex and capex objectives.[28] One of the objectives is to comply with all applicable regulatory obligations or requirements associated with the provision of standard control services.[29] That includes compliance with the Ring-Fencing Guideline.
- The NER also require the AER to accept SAPN's forecast capex and opex if they are shown to be prudent and efficient.[30] Therefore, we should be allowed to recover our costs instead of self-funding the cost of compliance. We have demonstrated in this business case addendum that our forecast is both prudent and efficient because:
    - there is an identified need to take further action to comply with the Ring-Fencing Guideline and thereby depart from SAPN's current manual-based compliance approach (ie our base-case);

[24] AER, *Draft Decision—SA Power Networks Distribution Determination 2020 to 2025*, Attachment 5: Capital expenditure, page 73.
[25] The National Electricity Law is set out in the schedule to the *National Electricity (South Australia) Act 1996* (SA).
[26] NEL, Section 7A—Revenue and pricing principles.
[27] NER, clause 6.17.1.
[28] NER clauses 6.5.6 and 6.5.7.
[29] NER, clauses 6.5.6(a)(2) and 6.5.7(a)(2).
[30] NER, clauses 6.5.6(c)(1) and (2) and 6.5.7(c)(1) and (2).

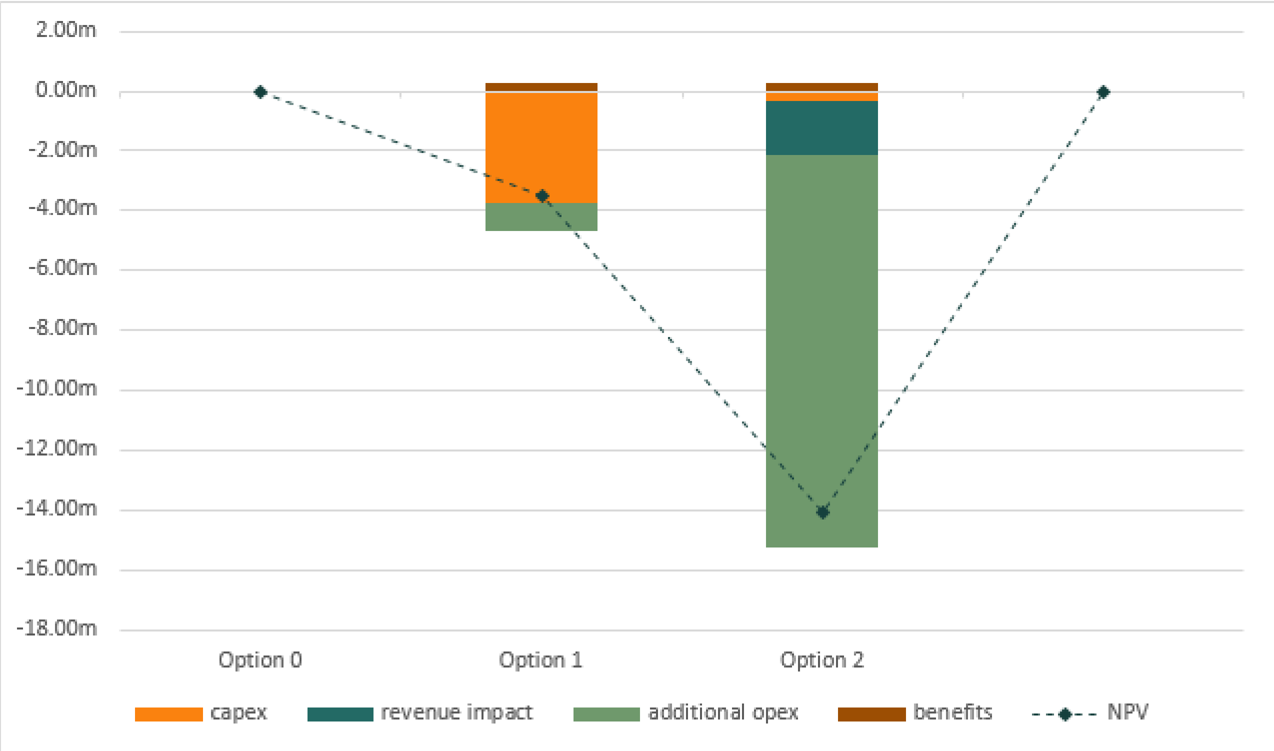
   - our recommended option of implementing ICT systems-based compliance (ie option 1) is shown to be the least cost option of complying with the Ring-Fencing Guideline; and
   - option 2 is shown to be the highest cost option of complying with the Ring-Fencing Guideline, principally because ceasing to permit Enerven to share the use of SAPN's ICT systems would increase costs to customers by removing benefits in SAPN's current cost allocation and asset sharing arrangements.
- Further, as allowing Enerven to share in the use of SAPN's ICT systems is our current approach, the benefits to customers (or our 'efficiency savings') by way of lower annual fixed ICT costs, are already built into our opex 'base-year' for the 2020-25 RCP. Therefore, there are no new efficiency savings over the 2020-25 RCP available to SAPN and the customers of our regulated services that could be used to 'self-fund' option 1.[31]

4.5 Summary of cost benefit analysis

Figure 1 presents the net benefits in NPV terms forecast over the 2020-25 RCP, of each option considered in this business case relative to the base-case. In summary:

- Our recommended option is option 1;
- Option 1 is the least cost means of ensuring compliance with the Ring-Fencing Guideline in the 2020-25 RCP.

Figure 1: Comparison of options relative to the base-case (Dec $2017)



[31] Where there are efficiency savings, the general principle is that they should be utilised by the distributor. (For example, where the AER approves a certain allowance for network augmentation capex but, during the RCP, the distributor identifies that a demand management option is feasible and will reduce the amount needed to spend augmenting the network. In this situation, the general principle is that the distributor should use the capex savings to fund the demand management option (which may be opex).)

4.5.1 Sensitivity analysis

Our finding that our recommended option 1 is the least cost option for customers holds even when undertaking extreme sensitivity testing of assumptions we used to derive the respective costs and benefits of our considered options, as follows:

- The key assumption in our analysis is that the percentage of ICT costs of applications shared with Enerven that are fixed, remains at its current level of 62 percent of total ICT costs for the 2020-25 RCP.[32]
- We noted in section 4.3 that this percentage is subject to minor annual variations depending on the nature of the payments required to be made for ICT hardware, software and services. These minor variations may therefore also vary the percentage of these shared and fixed ICT costs that Enerven contribute toward.
- To test the sensitivity of our results, we considered an extreme and unprecedent situation where the 62 percent figure falls to be only 10 percent. This results in an NPV of **-$3.773m** (Dec $2017), so that even under this scenario, our recommended option 1 is still shown to be the lowest cost option for customers.

Table 4: Summary of costs and benefits of option 2b relative to base-case

Total costs/revenue reduction 2020-25 ($4.3m (Dec $2017))	**Total benefits 2020-25 ($256k (Dec $2017))**
▪ Capex: $301k in new capex for assurance processes ▪ Opex: increase in regulated costs of $2.1m arising from removal of Enerven contributions to fixed SAPN ICT costs ▪ Revenue: reduction in the shared asset revenue adjustment of $1.9m for no longer using regulated ICT systems to deliver unregulated services.	Opex: would reduce by $256k, being the savings from ceasing manual compliance (the base-case)
Deliverability considerations	
Requires support of SAPN technical resources to remove access to ICT systems. This work would need to occur in the same time-period as proposed for option 1, ie prior to our SAP S/4 upgrade (separately proposed).	

The NPV for Option 2 is **-$3.7m** (Dec $2017).

[32] This is based on the 2018/19 cost allocation and corresponding 62 percent of fixed / unavoidable costs. Note, there are two years of ring-fencing cost allocation data. The 2017/18 fixed/unavoidable cost percentage is consistent with 2018/19.

APPENDICES

A. Detailed Costs and Benefits

Option 1—ICT systems-based compliance

Cost item, $000's (Dec $2017)	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	TOTAL
Project capex	2,487	1,268	-	-	-	3,755
On-going Capex						0
Net capex impact						**3,755**
Opex impact						
New opex		23	23	23	23	**92**
Less opex benefits		(64)	(64)	(64)	(64)	(256)
Net opex impact		(41)	(41)	(41)	(41)	(164)
NPV						**-3,486**

Details on the costs and benefits are explained in our original business case.

Option 2 - Exclude Enerven from sharing use of SAPN ICT assets

Cost item, $000's (Dec $2017)	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	TOTAL
Project capex		302	-	-	-	302
On-going Capex						0
Net capex impact	**0**					**302**
Opex impact	0					
Additional ICT opex	2,621	2,621	2,621	2,621	2,621	**13,107**
Less opex benefits		(64)	(64)	(64)	(64)	(256)
Net opex impact	2,621	2,557	2,557	2,557	2,557	12,851
Revenue adjustment impact	370	370	370	370	370	1,852
NPV						**-14,083**

- SAPN will need assurance that following Enerven's removal from SAPN ICT systems there are no impacts to SAPN operations, the work to ensure this is explained in section 4.4.4.
- The loss of contribution to SAPN ICT fixed costs is treated as additional ICT opex.
- There will be a reduction in manual compliance costs
- The revenue impact is shown as a cost increase.

Option 2b – Sensitivity analysis where the fixed cost proportion of ICT costs was only 10%

Cost item, $000's (Dec $2017)	**2020-2021**	**2021-2022**	**2022-2023**	**2023-2024**	**2024-2025**	**TOTAL**
Project capex		302	-	-	-	302
On-going Capex						0
Net capex impact	**0**					**302**
Opex impact	0					
Additional ICT Opex	423	423	423	423	423	**2,114**
Less opex benefits		(64)	(64)	(64)	(64)	(256)
Net opex impact	423	359	359	359	359	1,858
Revenue adjustment impact	370	370	370	370	370	1,852
NPV						**-3,773**

- Assumes the percentage of ICT shared costs which are fixed costs is 10%.
- This results in a smaller portion of these fixed costs that Enerven are sharing.

B. References

Document Name	Author	Date
AER, Electricity distribution ring-fencing guideline explanatory statement, November 2016	AER	Nov 2016
AER, Better Regulation – Shared Asset Guideline, November 2013	AER	Nov 2013
SAPN – 5.40 Ring-fencing Compliance IT solution Business Case - Confidential	SAPN	January 2019
AER – SA Power Networks 2020-25 Draft Decision – Attachment 5 – Capital Expenditure	AER	October 2019
ECA – Submission on SA Power Networks Regulatory Proposal 2020-25	ECA	16 May 2019
SA Minister for Energy and Mining – Submission on SA Power Networks Regulatory Proposal 2020-2025	SA Government	16 May 2019
AER - SA Power Networks 2020-25 - Draft decision - Attachment 1 – Annual revenue requirement	AER	October 2019
SA Power Networks Ring-Fencing Guideline Compliance Report 30 October 2018	Deloitte	30 October 2018
SA Power Networks Ring-Fencing Guideline Compliance Report 30 June 2019	Deloitte	30 June 2019