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CCP14

Advice to the AER on the SA Power Networks'  
Regulatory Determination 2020-25  
Revised Proposal

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Revised report, February 2020

**AER Consumer Challenge Panel - Sub-Panel CCP14**

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CCP14 wishes to express appreciation and thanks to the members of stakeholder groups associated with the SAPN Distribution Regulatory Reset, particularly the SAPN-CCP and its outgoing and incoming Chairs Sue Filby and Andrew Nance who have generously provided information and insights to assist the sub-panel in its review of the businesses' consumer engagement programs.

Finally, thanks go to Louise Benjamin for her contribution and wise counsel as a member of CCP14 until September 2019 and to Mark Grenning who held the important role of chair of CCP14 until mid-February 2020.

## **Confidentiality**

I wish to advise that to the best of my knowledge this advice neither presents any confidential information nor relies on confidential information for the comments.

## **The Consumer Challenge Panel sub-panel CCP14**

The AER established the Consumer Challenge Panel (CCP) in July 2013 as part of its Better Regulation reforms. These reforms aimed to deliver an improved regulatory framework focused on the long-term interests of consumers.

The CCP assists the AER to make better regulatory determinations by providing input on issues of importance to consumers. The expert members of the CCP bring consumer perspectives to the AER to better balance the range of views considered as part of the AER's decisions.

The author of this submission is CCP14, a sub-panel of the AER's Consumer Challenge Panel that the AER has established to focus specifically on the AER's regulatory determination of SA Power Networks, Energex and Ergon Energy for 2020-2025. CCP14 has provided advice related to these determinations throughout 2018 – 20, which can be found on the AER website.

CCP14 members are Mark Grenning (until February 2020), Louse Benjamin (to September 2019) and Mike Swanston.

This revised advice on the SAPN regulatory proposal has been prepared by Mike Swanston on the request of the AER by email on 12 February 2020.

# 1 Overview

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The Chief Executive Officer of SA Power Networks (SAPN) in his opening comments to the Revised Proposal, notes:

*“(This proposal is) challenging in terms of how we manage the competing priorities of price, reliability and safety, and setting a course for the future, when we also are being asked to deliver more for less and do it with a level of equity.”*

CCP14 acknowledges and respects the difficult task that all electricity distributors, including SAPN, are faced with in finding the right balance of affordability and price on one hand, and the reliability, safety and future needs of a large electricity distribution network on the other. The rapidly changing energy landscape, ageing assets and the increase in customer-owned distributed energy resources only magnifies the complexity of this task. SAPN is clearly at the forefront of this challenge.

Customers will gladly accept the reduction in distribution prices - \$62 for the average residential customers and \$276 for business customers – flowing from this regulatory proposal, noting that the savings result largely from external influences being the fall in the allowable rate of return on assets (WACC) and changed taxation allowances. Otherwise, this is a ‘business as usual’ proposal for SAPN. Operating expenditure is expected to increase by \$146M (11%) relative to the current period to \$1,442M, which includes a \$50M transfer of network repair costs from capital to the operating expense category. Capital expenditure requirements of \$1,712M are slightly higher than this period’s forecast expenditure.

In the proposal, SAPN follows the trend we have seen in other recent determinations with an increase in capital requirements for asset replacement and continuing significant investment in ICT. SAPN has also included \$86M to reasonably respond to the challenge of increasing Distributed Energy Resources.

SAPN raises the risk of further increases in asset replacement requirements as many network assets approach end-of-life. This concern, under the label ‘kicking the can down the road’, has not found its way explicitly into this expenditure proposal other than assisting to justify the \$42M investment in the ICT ‘Asset and Work’ program. Raising the issue provides a placeholder for further consideration of replacement capital needs in the medium term. Whilst we don’t fully support the conclusions SAPN has reached, it is clear that the issue will require further consideration by the AER beyond this particular determination.

## *Price focus*

Electricity customers in South Australia pay some of the highest electricity prices in the world.

SAPN has taken every opportunity throughout the reset to remind customers that network charges are less than half of a South Australian electricity consumer’s bill and of their strong relative efficiency and low asset base value when compared with other distributors. It is important however that every contributor to the overall electricity price takes all reasonable steps to assist in the affordability of electricity to all consumers.

The commensurate focus on long-term price risk takes the form of demonstrated restraint in the growth in the regulated asset base (RAB), recognising the risk of increasing prices should interest rates (WACC) climb, as well as the imperative to innovate to find solutions that avoid investment wherever possible in long-term assets as we enter an environment of new energy technologies, microgrids and wider consumer energy choice.

Throughout the engagement on this proposal, we consistently detected a level of discomfort from a number of stakeholders that insufficient priority was being placed by SAPN on driving lower energy prices. Essentially, we believe that some stakeholders were not fully convinced that the right balance between affordability and the requirements of SAPN had been struck.

This thinking was amplified by the fact that it is factors outside of SAPN's control - lower WACC and revised tax allowance methodology – that are largely responsible for the lower prices to be delivered as part of this proposal. If these external influences are excluded, then network prices for the representative consumers would most likely have risen. Importantly, SAPN could have been much more transparent in communicating this fact to their consumers in workshops and documents.

Similarly, a number of 'line ball' decisions by SAPN - such as the timing of the replacement of their SAP system or the need for a placeholder contingent project for bushfire response – could have 'gone either way' in either challenging the organisation to seek ways to defer or minimise costs versus choosing to include the costs in this proposal. Whether it be the opportunity in a low-WACC environment or just a risk-adverse nature, SAPN in many cases appears to have chosen the investment option.

SAPN are taking a measured and innovative leading response to the challenge of increasing DER in the local networks; and for that SAPN is to be commended. Outside this area though, there was not a lot of evidence in the proposal of SAPN challenging itself through innovation, proactive risk management and reviewed work practices to meet the community obligation of lower energy distribution costs.

### *Revenue and prices*

Consumers have welcomed the fall in network prices that will result from this determination. The reduced pressure on prices from lower WACC is a real benefit for consumers. The significant influence of the fall in WACC and changes to taxation arrangements in delivering this result cannot be ignored.

Two issues for consumers come into focus as a result of this influence. Firstly, it is important to critically consider the underlying change in revenue and organisational efficiencies from factors that are directly influenced by the utility itself, such as operating costs and capital investment. Secondly, the risk of prices rising significantly in the future from the influence of a rising regulatory asset base raises concerns.

The AER notes in its draft decision that the allowed revenue is 6.4 per cent lower than that of the 2015-20 decision. Our simple analysis suggests that the changes to WACC and taxation deliver a fall of around 14% in revenues. The increase in opex and other revenue requirements by SAPN absorbs 8% of this fall, including the impact of the 0.5% productivity requirement.

It is recognised that direct comparisons of revenue by period are not perfect, with capital / operating expense trade-offs and changes to asset repair / replacement definitions having an impact on revenue requirements. To their credit, SAPN provided considerable detail about their opex build-up early in the engagement process and have made a strong case to consumers, who are largely supportive of SAPNs opex requirements.

However, we would have much preferred that SAPN were more transparent with consumers as to the underlying revenue increases in their engagement and public documents related to the reset.

### *Capital expenditure and innovation*

The proposed capital expenditure attracted a large proportion of stakeholders' involvement. SAPN presented persuasive arguments on a range of investment proposals, in particular the intergenerational aspects of replacement of ageing network assets, the role of ICT in efficient asset management and the concept of community equity in improving network reliability in worst served areas.

Whilst the majority of the capital investment proposals came across as justified, the thought remained that maybe a greater level of investment restraint overall may have been prudent. In these times of consumer cost pressures and fast-changing technology, a greater focus was needed in the engagement to demonstrate how SAPN sought further efficiencies in work delivery to drive costs down and to manage the risk that some longer-term investment plans may result in stranded or underutilised assets.

Faced with ageing network assets, stakeholders were turning to SAPN for technical innovation, balanced risk management and new thinking in keeping a lid the repex demands of an ageing network. Given the world-leading position that SAPN holds on managing DER, we were hoping that SAPN could utilise that opportunity in, for instance, proposing new ideas for approaching reliability in rural and remote areas or addressing the challenges of network maintenance in less traditional ways.

We cannot support SAPN's case for the entire revised level of proposed capital investment, however the additional information provided to the AER and presented in subsequent workshops suggests the majority of the proposed additional capital allowance above that substituted in the draft decision is warranted. In its assessment of the revised proposal, the AER is encouraged to critically review SAPN's proposals on increased repex (including the role of ICT in supporting repex cost reduction), non-recurrent ICT and proposed connection costs. In addition, the investment in network 'hardening' warrants deeper consideration, based on recent industry discussion on the subtleties of robustness, resilience and reliability providing different approaches to meeting community needs of networks. In addition, the matters of future costs associated with ageing assets raised by SAPN warrant close examination by the AER.

### *Acceptance*

Through the engagement, SAPN has perhaps inadvertently raised the concept that the outcome of lower prices through low WACC presents an opportunity to address some issues of repex deferral risk or meeting a broader community obligation of a more robust network without an immediate adverse impact on prices. Such an approach merits further conversation, as we believe it will be raised in future resets across the NEM. In this particular reset however, we observe that SAPN's customers have a mixed response, supporting specific local new investments to improve the network on one hand and seeking broader initiatives to lower prices as much as reasonably possible in both the short and longer term on the other. Some utilities frame the beneficial investment to consumers as 'just a few dollars on the bill', which resonates in an environment where overall average bills are already falling. Ultimately though, guidance comes from the high level of support we noted for the position taken by the AER in the Draft Decision.

Towards the end of the engagement process, a general feeling of 'reluctant acceptance' by consumer advocates and stakeholders for the proposal as a whole was evident, following the significant amount of evidence provided by SAPN to justify their position.

There is nothing in the SAPN proposal that is not targeted at providing a robust and safe electricity supply for SA electricity consumers. There is also agreement that, in the face of the significant amount of evidence provided by SAPN to support their position, this proposal reflects – or, at least, highlights - the challenges and requirements for the investment required to meet community expectations for a safe, reliable and 'future capable' electricity supply.

However, there remains a sense of disappointment that SAPN could have been more committed – pressured, perhaps - to more aggressively seek opportunities to lower distribution prices; demonstrating a passion for innovation, proactive risk management and new work practices to deliver lower electricity prices for SA consumers. Given the remarkable circumstances in South Australia of high DER penetration, along with an active and involved customer base, a supportive state government and highly capable organisation, SAPN has the opportunity to set a new challenge to all distributors in adapting these conditions to benefit lower energy prices.

It is difficult to say that the proposal in its entirety is *capable of acceptance* by all, or even most consumers, as the balance between lower (lowest ?) prices and an effective network is buried deep under a large number of reports, technical and economic analyses and conjecture regarding network futures.

That being said, the balance of evidence is that SAPN are proposing expenditure that is to consumers' benefit. The term, overheard in a recent consumer workshop, of 'reluctant acceptance' is appropriate.

## 2 Key issues from this advice

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This advice on the Revised Regulatory Proposal, as well as some observations on the wider SAPN reset process, the following issues highlights:

1. The *engagement undertaken* by SAPN was timely, focussed and professional. A significant amount of information was provided by SAPN to consumer and stakeholder workshops to support and promote their proposed expenditure plans. The concern is that in the latter stages of the engagement, consumers' concerns about price pressures and long-term price risk may not have been fully recognised and considered, and subsequently not reflected meaningfully in the revised proposal.
2. The *SAPN-CCP engagement model* is a useful and potentially highly effective engagement framework.
3. We believe that *SAPN could have been more transparent with their customers* in their public documents about the nature of the proposed price falls in the 2020-25 reset period, and the fact that much, if not all, of the price reduction was due to factors other than actions specifically by SAPN. Similarly, the fact SAPN's operating cost proposal (excluding the capex/opex swap) is somewhat higher than the forecast expenditure in the current period could have been better discussed with customers.
4. We support SAPN's *opex proposal*, subject to a review of the labour cost forecast methodology.
5. *CCP14 does not support some components of SAPN's revised capex proposal*, particularly the proposals related to network reliability, new connections and ICT. We support the ICT Assets and Work package on the basis the AER can determine that the investment amount is efficient.
6. We support the *revised DER investment*, and encourage SAPN to continue their good work with other utilities in sharing experiences and fostering a common industry approach to growing DER.
7. *We hoped to see an innovative plan* where SAPN could lever off the high level of DER growth and funding to develop new and more cost effective ways of managing asset age risk and poor reliability, rather than lean towards the more traditional approach presented in the capex proposal and discussed in the Frontier Economics report on long-run repex considerations.
8. In such support for capital investment, we recommend a more formal '*register of future commitments*' to hold utilities (as much as reasonably possible) to the promised outcomes of such investment, much like the requirements for an ICT post-implementation review.
9. Whilst acknowledging the framework in which the AER must operate, from a consumers' point of view we reiterate our *concerns regarding the allocation of the CESS benefit* to SAPN.
10. *CCP14 supports the SAPN Tariff Structure Statement* and we congratulate SAPN on their engagement that led to it. We note the clear link between the network challenges and the tariffs, and the way tariffs are made as relevant as possible to retailers. We believe SAPN is a leading utility in the development of their tariff structure. Concerns still remain with consumers as to how these initiatives will manifest themselves in an effective and timely way through the retail bills to consumers.
11. SAPN has *raised some thought-provoking matters* under the banners of community equity in network reliability and of 'kicking the capex can down the road' and the intergenerational sharing of costs an ageing asset base. Some consumer advocates also identified the same issue in the latter stages of the engagement, without reaching a definitive conclusion on support or otherwise for the concept.
12. The *long-term decline in operating and capital efficiency* for a majority of network utilities, including SAPN, is a matter of concern to consumers.
13. For clarity, the influence of 'external' financial factors, in particular WACC and tax, on revenue and subsequent prices needs to be separated from the impact of decisions made by the company.

## 3 Consumer and Stakeholder engagement

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### 3.1 Features of SAPN's consumer and stakeholder engagement

We remain complementary of the framework, level of investment and commitment that SAPN has demonstrated in their customer and stakeholder engagement. In fact, CCP14 maintains the position that the SAPN engagement framework is a model that other utilities should consider.

Throughout the reset process, SAPN's engagement workshops have been well prepared, well resourced, and well attended. The workshop materials reflect a high level of information and engaging presentation. At all times, we observed 'the right people in the room'. Unfortunately, we did not observe the overt support from SAPN's executive team or directors through the engagement as we have in other utilities' stakeholder workshops.

SAPN's engagement has mainly involved its wider Consumer Consultation Panel (SAPN-CCP) and wider working groups. The SAPN-CCP is inclusive, well resourced, informed and engaged. We remain very complementary of the SAPN-CCP framework.

If we were to have one criticism of the engagement process itself, we believe that SAPN could have involved its SAPN-CCP in assessing more quantitative information and business case data. Whilst it is important to present the narrative around expenditure proposals; given the expertise and experience of the SAPN-CCP members, we believe that some conversations could have been undertaken at a higher level of quantitative analysis and assessment, with greater in-depth analysis; perhaps with some of the hallmarks of the Customer Forum trial with Ausnet Services.

Instead, much of the workshop material was descriptive and focused on the narrative. Some of the strong assertions made by SAPN, such as "the current level of replex investment will lead to ... a decline in the health of the network ... asset failures will continue to increase", would be more robust if stakeholders were given more time and detail to allow greater analysis.

We acknowledge that the role of the SAPN-CCP extends beyond the requirements of the regulatory reset, and that time constraints can limit the level of detail that can be analysed.

Whilst a balanced 'non-business' view is important, we look forward to SAPN using their SAPN-CCP in a more collaborative role (as defined in the IAP guideline) in their ongoing engagement.

We noted in some of the SAPN-CCP meetings and workshops we attended that SAPN went to the trouble to respond to questions raised by that group in writing in the subsequent meeting. We see that as a positive commitment by SAPN to the SAPN-CCP group, demonstrating respect to the members of the panel and to the role of the SAPN-CCP.

### 3.2 Cans, Roads and Capex

In their RP, SAPN reconfirms its approach to balancing affordability with the challenges of maintaining a reliable supply of electricity.

The term 'kicking the can down the road' arose a number of times in the latter stages of consumer engagement, including the AER Stakeholder Forum on 30 October 2019; and was raised by SAPN and consumers alike. This catchphrase subsequently features a number of times in the SAPN RP and in the associated consumer engagement as a proxy for 'deferring work to a later date', or even 'procrastination', particularly in the context of replex and property investment. This theme features a number of times in the SAPN RP and is particularly evident in the significant discrepancy between SAPN's position and that of the AER regarding required replex investment.



The earlier priority of efficiently deferring work until necessary, through innovative, effective and data-driven asset management, has been somewhat superseded by an emerging paradigm - exposed largely by this SAPN proposal - that not all deferral is good. How this manifests itself in practice remains unclear as the counterfactual to replacing or renewing assets as late as possible is to replace them before replacement is needed.

The practical implementation of this issue was explored to some extent, but not in any detail, in the SAPN repex workshop. We also note that the issue is discussed in detail in the Frontier economics report that was lodged late in the reset process. With this evidence, the early investment in repex resonated to some extent with some consumers. We believe this is an important conversation to have, even if it is necessary to consider this issue in depth outside this regulatory determination framework.

### 3.3 SAPN's key engagement messages

Consistent with this response, SAPN has undertaken a considered and detailed engagement programme related to their Revised Proposal under the banner of three themes: affordability, safety and reliability, and the transition to the new energy future. In our observation, the engagement activities have focussed in particular on three issues:

- a) Improving supply reliability in a number of rural and remote parts of the network
- b) Addressing asset age and performance that is increasing the risk of blackouts and safety issues
- c) Investing in new technologies to support changing customer energy demands.

SAPN also engaged effectively with retailers and consumers on their Tariff Structure Statement (TSS). The TSS is discussed in more detail in 8 of this advice.

Consistent with the theme of 'kicking the can down the road', SAPN is approaching their more recent engagement with the idea of investing now and avoid imposing costs on later generations.<sup>1</sup> This approach is, in our observation, resonating to some extent with customers, but not to the point where the robust examination of investment plans can be relaxed. In our observation of the SAPN-CCP meeting of 27 November, a number of the panel members restated the affordability imperative to seek cost reductions and avoid investment that will have cost implications for years to come.

### 3.4 CCP14 involvement

SAPN invited CCP14 to attend and be involved in the majority of the workshops and events related to the RP. At an officer level, we have found our working relationship with SAPN to be collegiate, inclusive, responsive and professional.

Unfortunately, a number of the SAPN events either coincided with other CCP commitments or were arranged a few days apart, and with both CCP14 members being based interstate, the cost and logistics made it difficult to attend many of the SAPN workshops. In most cases, SAPN did make teleconference facilities available for the CCP where it was appropriate.

We observed and participated in a number of SAPN engagement activities, including:

- a) The SAPN Other Network focussed discussion of 1 November (telco),
- b) The SA electricity retailers' forum on the 15<sup>th</sup> November in Melbourne, and
- c) The SAPN-CCP workshop to discuss the RP, 27<sup>th</sup> November in Adelaide.

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<sup>1</sup> SAPN Revised Proposal, Section 1, p 4

We were also able to meet with SAPN staff on a number of occasions outside the formal regulatory reset workshops. Finally, we had very good engagement with SAPN on preparing this submission as questions arose and clarifications were sought.

### 3.5 Engagement activities

SAPN arranged a number of events for stakeholders soon after the publishing of the draft determination, setting the scene and addressing some of the issues SAPN intended pursuing in the RP. Focussed discussions were held with their SAPN-CCP in November on the capex requirements of the RP. SAPN also undertook a number of workshops related to public lighting, connections and the inter-DNSP DER working group to inform these specific interest groups on matters associated with the RRG.

A field visit for their SAPN-CCP included a visit to the Marlestone depot and an inspection of CBD cable systems. Finally, two closing workshops were held; one with their SAPN-CCP to discuss the key issues of the RP, and another held in Melbourne to present the Tariff Structure Statement to retailers.

Regarding the DER working group, various CCP members have noted emerging common themes demonstrated by DNSP across multiple jurisdictions to DER growth. Some of these initiatives were first noted in the early discussions with SAPN, the AER and CCP14 in the initial stages of this reset. We believe the emergence of an aligned approach is likely to yield benefits for many customers, and we commend SAPN for their work to establish and maintain the DER Working Group (DERWG).

We are aware that SAPN also maintained significant detail regarding their RP on the *Talking Power* website. The website continued to focus on the three key aspects of the capex proposal in the RP, being:

- Hardening the network
- Improving reliability for worst-served customers
- Replacing and upgrading ageing assets

SAPN, to their credit, permits ad-hoc and apparently unmoderated ‘warts and all’ comments by customers on their *Talking Power* website<sup>2</sup>. We commend SAPN for the establishment, maintenance and application of the *Talking Power* website.

### 3.6 The influence of the engagement in the Revised Regulatory Proposal

We acknowledge the discussion of the customer and stakeholder engagement and the responses by SAPN outlined in section 2 of the RP. To a large extent, the summary Table 2 on pages 8 and 9 of the RP fairly reflects the key issues we observed in the last stages of SAPN’s engagement.

Three comments arise, however.

Firstly, we believe SAPN may have understated the importance customers place on energy affordability. Granted, there are other components of the electricity bill in SA that have a significant impact on affordability, however consumers are seeking every possible avenue to address the high cost of energy. SAPN’s comments on ‘keeping prices down’ refers to customers ‘welcoming price reductions’ and ‘consider the impact (of investment programs) on customer bills.’ However, our observation is that some sections of the community are seeking actual reductions in network costs – a sentiment that is not clear in the SAPN documentation.

Secondly, we continue to have difficulty reconciling the information that customers express to SAPN in the engagement process and the way that information translates to the Revised Proposal. For example, SAPN acknowledges the customer imperative for affordability. In its RP, SAPN states, “*We accept the AER’s Draft*

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<sup>2</sup> [https://www.talkingpower.com.au/phase-5-2020-25-revised-regulatory-proposal/news\\_feed/hardening](https://www.talkingpower.com.au/phase-5-2020-25-revised-regulatory-proposal/news_feed/hardening)

*Decision to reduce expenditure across many programs*<sup>3</sup>; yet the RP seeks to reinstate all but \$29M (1.7%) of the capital expenditure, despite the AER considering a 27% reduction in capex.

Finally, we did note some reliance on consumer feedback that, in our opinion, can be obtained without a full and balanced understanding of the true costs and alternatives available to meet changing energy needs. For example, SAPN notes the high level of support for modest, targeted investment in improving reliability for worst-served customers. This sentiment underpins the resubmission the \$30.1M investment proposal that targets both low reliability feeders and hardening the network.

In response to such a line of enquiry, we would be surprised if customers and communities chose *not* to reflect a strong preference for improving supply reliability for badly affected customers. Similarly, we acknowledge the feedback from stakeholders such as Business SA that the \$15.3M network hardening program should be resubmitted<sup>4</sup>. The question is not whether this is a good idea, but whether SAPN is undertaking this responsibility in a prudent and efficient way, seeking synergies and efficiencies, considering all valid alternatives and reasonably allocating limited budgets consistent with their obligations.

This issue is explored further below, in section 6 *Capital Expenditure* below.

Another theme that has emerged from recent engagement by SAPN is that of equity – both intergenerational and across customer cohorts. This approach is evident in SAPN’s revised justification of replacement capital (REPEX) and ICT investment. In recounting customer feedback, SAPN notes<sup>5</sup>:

*“Keeping prices down now is a high priority, but not at the expense of poorer service and higher prices for future generations. Sustainable levels of replacement expenditure, delivered efficiently through the Assets and Work IT program, will ensure a more equitable distribution of costs between current and future customers”*

We are somewhat supportive of this sentiment. We believe that SAPN has made a reasonable case to consumers regarding the age of the bulk of their assets – particularly overhead conductors – are reaching the end of their service life, with the likelihood of significant future maintenance and replacement costs<sup>6</sup>. That is not to say that consumers are in complete agreement with SAPN. In the SAPN-CCP meeting of 27 November, it was noted that over the longer term, the form and required performance of the electricity network in the future may be quite different to today’s expectations. Similarly, the risk of a severe price impact should the allowable returns of the Regulated Asset Base increase in the future dictates a strong commitment to avoiding any long-term investment where reasonably possible.

Therefore, we look to the AER to walk the fine line recognising the prudent smoothing of the long-term costs of asset management with the imperative for very targeted, well-considered, not-a-day-too-early asset replacement.

### 3.7 The limited opportunity to assess new information

The AER ‘kept the door open’ for SAPN to provide further information in the period after the Draft Decision to clarify their position on a number of matters. We understand why the AER took this approach, as we were well aware of the considerable interaction between the AER and SAPN working towards reaching agreement on the content and nature of particular expenditure proposals. Our consideration of the

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<sup>3</sup> SAPN Revised Proposal, Section 2. P8 - Table 2.1

<sup>4</sup> SAPN Revised Proposal - Attachment 5, Capital Expenditure, p53

<sup>5</sup> SAPN Revised Proposal, Section 2. P8 - Table 2.1

<sup>6</sup> SAPN RP - Attachment 5, Capital Expenditure, p23 (Long Term Repex Profile)

business cases at the time supported the AER’s view that many investment justifications raised further questions, in particular those associated with ICT.

We wish to express our disappointment that such a situation was necessary however, especially considering the time available, investment in consultants and extent of the information requests that were undertaken in the period between the initial proposal and the draft determinations. Whilst the frustration with the situation was evident from both sides, we are complementary of the way the AER and SAPN worked together both formally and in less formal circumstances to work towards a mutually acceptable position regarding information quality and the form of justification.

Such action was not without a significant downside, however. Many consumer groups treat the Draft Decision as a ‘peg in the sand’ to respond to, but the permission (or was it a requirement ?) to submit a large number of new business cases and additional information after the Draft Decision was made meant that to prepare a meaningful response to the RP, a large amount of additional data needed to be absorbed. Much of this new data was not provided as part of the post-draft decision engagement (as it focused on TSS matters) and was not generally available until after the information was published on the AER website on the 13 December.

This placed unrealistic expectations on consumer advocates to meaningfully assess and respond to the new information, especially considering the impact of the Christmas / New Year holiday period.

## 4 Revenue

We welcome the fact that the AER and SAPN have largely agreed on many aspects of the draft decision that are open to discussion, including the TSS, opex (substantially), LV management and a number of other capex programmes.

The Draft Decision allowed SA Power Networks to recover \$3,905M (nominal) from its customers in the 2020-25 period, \$310M (7.4%) less than the \$4,214M proposed by SAPN in the initial Regulatory Proposal (RP). The predominant influences were the fall in the allowable WACC and a 5.1% reduction in allowed opex. The historical, forecast and proposed revenue streams for SAPN are shown in Figure 1.

Figure 4.1.1: Revenue (\$2020)

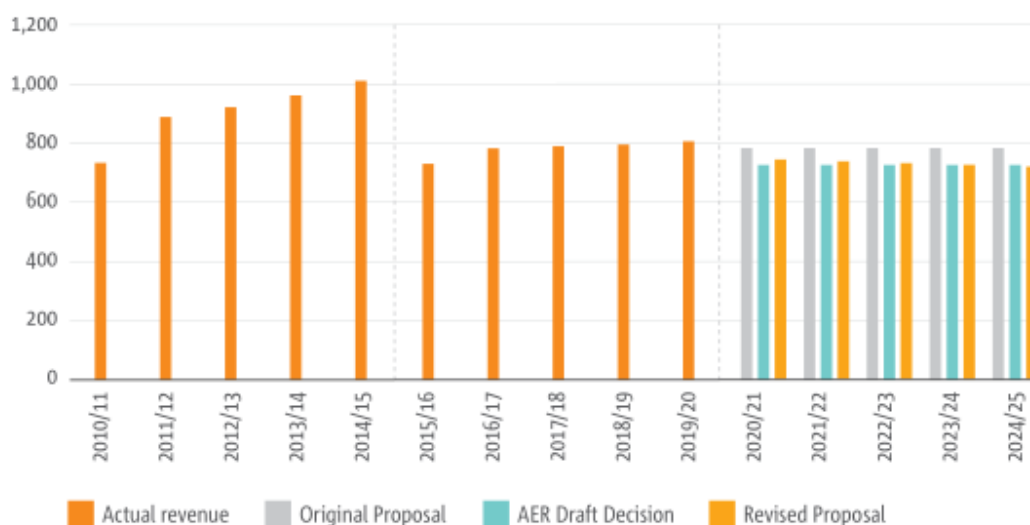


Figure 1: Revenue over three regulatory periods (Source SAPN RP p. 17)

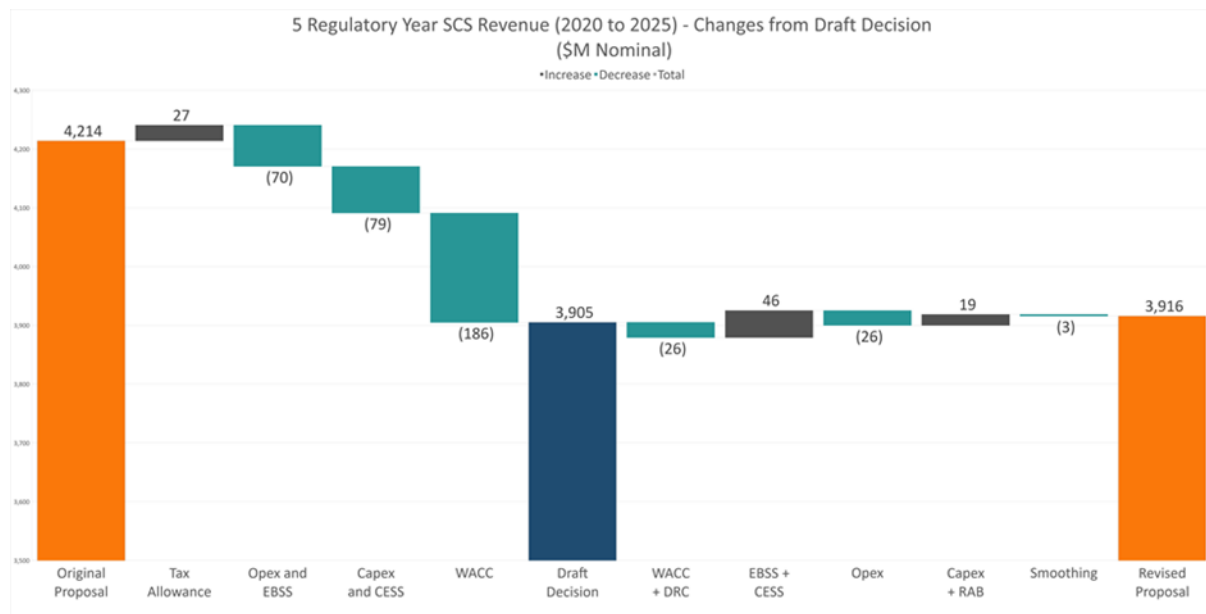
Throughout the engagement process CCP14 has encouraged SAPN to be more transparent with their customers about the source of the proposed price falls – particularly the contribution of falling WACC and a change in the tax allowance calculation methodology.

The RP Overview document (p17) in the chapter on Annual Revenue Requirement <sup>7</sup> notes:

*“The AER’s Draft Decision has forecast a lower nominal revenue amount of \$3,905 million, which is \$309 million lower than we proposed. More than two thirds of this reduction (approximately \$223 million) is due to the significant decline in financial markets since November 2018, with the remainder of the reduction due to lower expenditure forecasts allowed by the AER.”*

Since publication of the Revised Proposal, CCP14 has engaged with SAPN to better understand the factors behind the expected price reductions from 1<sup>st</sup> July 2020. Given the difficulty in separating out different factors contributing to the specific price reductions for residential and business consumers, the analysis focussed on the impact of the various factors on total revenue as a proxy.

SAPN provided the following waterfall chart (Figure 2) showing the change from the Original Proposal (OP) to the Revised Proposal (RP).



**Figure 2: SAPN Revenue changes – Original Proposal to Draft Decision to Revised Proposal (source: SAPN)**

This chart indicates that the total WACC impact of \$212m is approximately 71% of the total \$298m reduction from \$4,214 to \$3,916M.

It is important to note that the proposed revenue, excluding the influence of WACC is significantly higher than both the amount allowed and the forecast expenditure for the current regulatory period. This is a significant issue related to the way revenue and price changes are conveyed to consumers, where it is critical for reasonable assessment that the impact of external factors (WACC, Tax) are separated from those that directly reflect decisions taken by the business itself.

<sup>7</sup> Revised Proposal Overview p. 17

## 4.1 Regulatory Asset Base

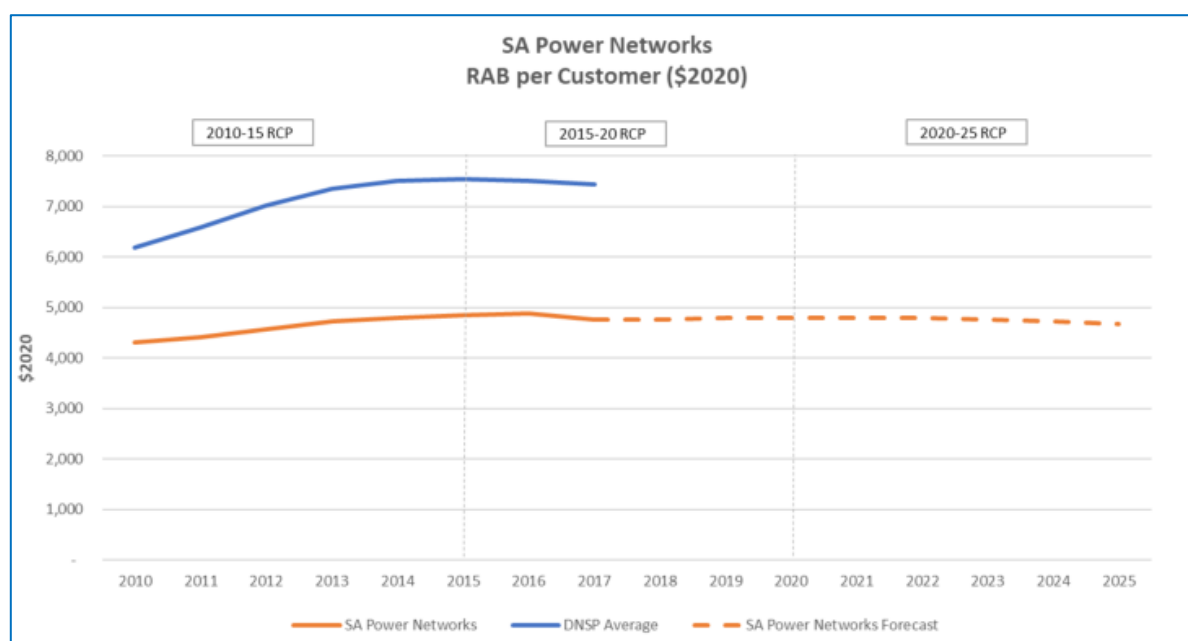
The changes in the Regulated Asset Base (RAB) are shown in Table 1, indicating that the nominal growth is similar to the current period. Real growth is around 1.6% based on AER forecast inflation.

RAB \$M, nominal	2015-16 Opening	2019-20 Closing	Change	2020-21 Opening	2024-25 Closing	Change
<b>SAPN</b>	3,778	4,357	+15%	4,357	4,973	+13%

**Table 1: SAPN RAB** (Source: SAPN Regulated Asset Base Attachment 2 p6)

This RAB data does not reflect the AER's draft decision on closing RAB as the forecast capex and regulatory depreciation from the Draft Decision has not been accepted.

SAPN's low RAB in relation to the industry average is noted. Many factors underpin that position, hence the focus by consumers and stakeholders is the relative change in RAB and the possible future price risk of SA consumers once interest rates, and hence Return on Asset, starts to rise again. The RAB per customer remains relatively constant over the 2020-25 period. SAPN's position with a RAB per customer considerably lower than the average of other networks is evident.



**Figure 3: RAB per customer** (Source: SAPN Regulated Asset Base Attachment 2 p 7)

The flat trajectory of the RAB / customer is encouraging. SAPN has not provided the base data behind this graphic representation, so there remains some concern as to the customer growth data that underpins this calculation, especially because the customer growth numbers in the proposal are regarded by some as high. Similarly, the future impact on the RAB / customer as a consequence of SAPN's position on asset ageing and the risk of increased repex has not been considered with consumers and stakeholders as yet. In the interests of transparency and informed consumers, it should be.

The question remains: what is SAPN's commitment to a falling RAB / customer ? This remains a clear indicator of a utility's commitment to innovation and long-term price reduction.

## 4.2 Capital Efficiency Sharing Scheme (CESS)

We remain supportive of the concept of the CESS and recognise that the operation of the scheme is outlined in the *Capital Expenditure Incentive Guideline 2013*. The AER has allocated an amount of \$69M to be paid to SAPN under the CESS, a slight adjustment from the level proposed by SAPN.

SAPN has made it quite clear on a number of occasions that the prime cause of underspend of the 2015-20 capital allowance is due to 'abnormal and anomalous conditions', in particular 'financing uncertainties arising from the AER at the time' and unprecedented weather conditions<sup>8</sup>.

Therefore, we struggle to see the application of such innovation or efficiency in the SAPN capital underspend of 2015-20.

We recognise that the rules and calculations inherent in the CESS are complex, yet from a consumers' point of view, the concept of a CESS reward is underpinned by active decisions by the utility to defer investment through the use of innovation, reviewed risk or other productive and efficient means. In light of the lack of clear evidence of such actions by SAPN, CCP14 encourages the AER to review this decision.

## 5 Operating Expense Forecasts

Table 2 summarises SAPN's opex requirements.

Based on this information, SAPN plans to underspend its operating expenses in this period by around 5%. In the revised proposal, SAPN has updated its EBSS carryover forecast from -\$30.1M to carryover gain of \$4.6M, due largely to the lower than forecast opex outcome and removal of opex provisions for 2018/19.

The opex proposal is slightly below (1.6%) that substituted by the AER in the draft decision.

\$2020 excluding Debt Raising Costs	2015-20 Final Decision/ Forecast	Original Proposal	AER draft decision alternative estimate	Revised Proposal
<b>SAPN</b>	\$1363 / \$1,296	\$1,530	\$1,466	\$1,442

Table 2: Changes in opex (Source: SAPN RP Attachment 6 p. 6)

SAPN's proposed operating expenditure is an 11% increase on the current period forecast expenditure, a continuation of the increased real level opex spend over 15 years, as shown below in Figure 4.

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<sup>8</sup> SAPN RP, Attachment 5, Capital Expenditure, p23

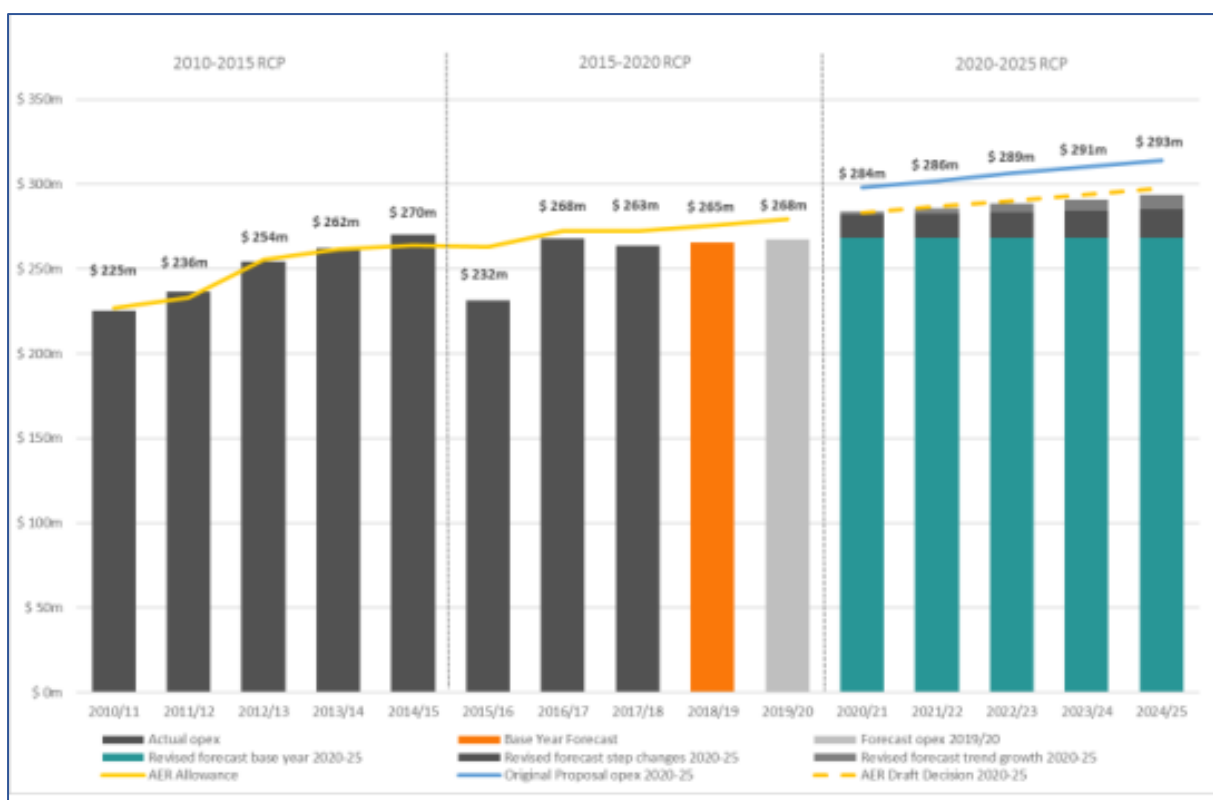


Figure 4: Historical and forecast opex (\$2020) (Source – Attachment 6 – Operating Expenditure p.8)

### 5.1 Step changes

Relative to the base year 2018/19, the major changes are noted in Table 3 below. The AER has accepted the need for six of the proposed step changes, but in some cases reduced the amounts proposed. SAPN has largely accepted the AER decisions and have updated their proposal.

Category	Revised proposal
Step Changes	76.2M
Output growth	24.7M
Real price growth	20.4M
Productivity growth	(20.1M)

Table 3 - SA Power Networks opex proposals (source: data from SAPN attachment 6 p14)

#### Step change – cable and conductor minor repair

This step adds \$49.7M to the operating costs, a significant change. SAPN has communicated the background and purpose of this change, and it is supported by consumers. The implicit change to the underlying definitions of ‘replacement’ and ‘repair’ will be no doubt closely examined by other utilities. The fact that SAPN has accepted the reduced allowance substituted by the AER is noted.

#### Step change - Utilities Cyber Maturity Uplift

This is a revised step change and covers non-network ICT to implement processes and systems to ensure that SA Power Networks can comply with new cyber security related regulatory obligations stemming from AEMO work to develop the Australian Energy Cyber Security Framework. There is a non-recurrent capex of \$5.15m with an opex step increase of \$1.7m.



The CCP recognises the need to protect systems for cyber security risks. We look to the AER to ensure that any expenditure is at a prudent and efficient level. These costs are occurring across networks and we would recommend that the AER develop a more holistic approach to its evaluation of such expenditures that are only likely to increase in the future.

### *Step change – GSL payments*

Guaranteed Service Level (GSL) payments serve two outcomes. Firstly, they represent some compensation in part to customer who have been negatively impacted by network events, predominantly extended interruptions to supply. Secondly, they serve as some incentive for distributors to minimise the extent of these negative events. Being able to recover all GSLs costs, including averages that include significant, rare events tends to water down the impact of GSLs to encourage improved utility performance.

ESCoSA has revised the service standards and GSL arrangements to take place from 1 July 2020.

In their revised proposal, SAPN has significantly reduced the financial impact of the change from a negative step of \$19.9M to only \$1.8M, predominantly by taking the base year (2018/19) GSL payment of \$5M in lieu of the 5-year average of \$9.7M pa in the opex calculation. The change to ESCoSA service standards has a noticeable impact, but small in relation to that of the base year change.

The data provided in tables 6.4 (proposal) and 6.2 (revised proposal) highlights the one-off impact that SAPN experienced during an extraordinary period of severe storms in 2016/17 that resulted in reliability duration payments totalling of \$27.5M. Outside that event, the average annual payments are less than \$4M pa over the past 10 years, or \$6.8M when 2016/17 is included in the average. The averaging over ten years as proposed by the AER is supported as it better considers the sporadic nature of these severe events.

The question for consumers is whether the \$5M GSL expense in 2018/19 is reasonably indicative of the expenses expected in the 2020-25 period. From the data above, this is not an unrealistic forecast, especially if, as some predict, severe storm events may become more frequent. Therefore, this change is supported.

## 5.2 Labour real price growth

In the past the AER has used an average of the forecasts from the networks’ forecaster (usually BIS Oxford) and the AER’s forecaster (Deloitte) to assess real cost escalation. In our May 2019 submission on the SAPN Original Proposal we encouraged the AER to review this averaging approach, particularly in the light of the evidence provided by Business SA on subdued growth amongst its members. Other consumer advocate submissions on the Regulatory Proposal – SACOSS, The Energy Project and the SA Wine Industry Association - all encouraged the AER to review the labour cost forecasts for the same reason.

Based on the latest forecasts by the two consultants, Figure 6 shows that the AER’s approach results in an average of ~0.5% lower annual increase in real labour costs<sup>9</sup>.

	2020/21	2021/22	2022/23	2023/24	2024/25
BIS Oxford Economics %	1.11%	1.28%	1.44%	1.60%	1.33%
Deloitte Access Economics % <sup>56</sup>	0.41%	0.37%	0.34%	0.45%	0.44%
<b>Average %</b>	<b>0.76%</b>	<b>0.83%</b>	<b>0.89%</b>	<b>1.02%</b>	<b>0.89%</b>

Figure 5: Real Labour Cost Escalators (Source – Revised Proposal Attachment 3 p.30)

<sup>9</sup> See Revised Proposal Attachment 3 p. 23

We support the analysis undertaken by the AER as part of the Draft Decision process of the relative accuracy of the two forecasts that led to the conclusion<sup>10</sup>:

*“Based on this analysis, we now consider that Deloitte’s utilities industry real WPI growth forecast, rather than BIS Oxford Economics’, or an average of the two, better reflects actual Australian utilities real WPI growth.”*

The AER’s approach is supported as it better reflects the actual growth that has been observed and the advice received from stakeholder groups regarding expected growth.

## 6 Capital Expenditure

SAPN plans to invest \$1,712M in capital in the current 2015-20 regulatory period, slightly higher than the forecast expenditure for the current period of \$1,702M, as shown in Table 4 below.

The draft decision noted a significant reduction of \$478M (- 27%) in the amount of capital expenditure proposed by SAPN, to which SAPN responded as being ‘unreasonable and unsustainable’<sup>11</sup>.

Whilst the AER Draft Decision was in general welcomed by consumer groups and stakeholders, it is recognised that the draft contained a number of ‘placeholders’ that were inviting further information and justification from SAPN.

CAPEX \$2020	2015-20 forecast	Proposal (RP)	Draft Decision	RRP	RRP, change from current forecast	
<b>Repex</b>	660	670	539	682	+ 22	+ 3.3 %
<b>Augmentation</b>	392	391	277	332	- 60	- 15.3 %
<b>Connections (net)</b>	169	213	176	262	+ 93	+ 55.0 %
<b>ICT</b>	311	285	197	279	- 32	- 10.3 %
<b>Non-network</b>	169	182	73	157	- 12	- 7.1 %
<b>Total Capex</b>	<b>1701</b>	<b>1741</b>	<b>1262</b>	<b>1712</b>	<b>11</b>	<b>+ 0.6 %</b>

**Table 4: SAPN CAPEX proposal (excluding disposals)**

Source: SAPN RP Attachment 5, p14. Numbers may not add due to rounding.

SAPN is proposing to reinstate almost all of the capital expenditure that was subject to revision by the AER. Almost all of the 42 supporting documents provided by SAPN to the AER and published on the AER website

<sup>10</sup> See p. 6.-32 [https://www.aer.gov.au/system/files/AER%20-%20SA%20Power%20Networks%202020-25%20-%20Draft%20decision%20-%20Attachment%206%20-%20Operating%20expenditure%20-%20October%202019\\_0.pdf](https://www.aer.gov.au/system/files/AER%20-%20SA%20Power%20Networks%202020-25%20-%20Draft%20decision%20-%20Attachment%206%20-%20Operating%20expenditure%20-%20October%202019_0.pdf)

<sup>11</sup> SAPN Revised Proposal, Forward, p (iv)

relate to the revised proposal capital expenditure. The key areas of review are repex, network augmentation, connections, ICT and property <sup>12</sup>.

Unlike the engagement in the Energy Queensland Limited reset where the prime focus has been on tariffs, we have observed that SAPN, stakeholders and consumer groups in SA have maintained a strong focus on engagement on capital expenditure throughout the RP consultation.

As in the draft decision for Energy Queensland Limited, the AER in the draft decision overtly provided the opportunity for SAPN to provide additional justification and supporting evidence for its capex proposal. However, whilst we understand why SAPN has now provided so much supporting documentation, it has created difficulties for consumer groups to manage their resources in order to remain effective in providing informed feedback on SAPN's Revised Proposal.

## 6.1 Capital investment trends

Trend analysis assists in confirming the alignment of the expenditure plans with the narrative presented to consumers as part of the engagement process.

Figure 6 below shows the SAPN RP capital profile, against a base of actual expenditure in 2010-15 as 100%. Whilst not suggesting that 2010-15 is an efficient reference year or strong base case, the trend from that period highlights the influences on investment planning. From that information, we note from a customer point of view:

- a) Replacement capital (blue line) is climbing, again consistent with SAPN's information to consumers that the ageing asset base is demanding higher rates of replacement despite improving repex efficiency through ICT investment.
- b) Network augmentation expenditure (orange line) continues to fall, consistent with experience across the NEM, and as a result of falling growth in peak demand. In SAPN's case, the downward trend is moderated somewhat by the increase in planned investment in reliability improvements and network robustness.
- c) New network connection costs (grey) have increased significantly from that of the past two periods, prompting questions about the underlying drivers of new connections and how they have changed in the past 10 years. The influence of the change in capital contributions is noted.
- d) Non-network expenditure (blue line ) (fleet, property) is expected to be somewhat cyclic.
- e) ICT investment (yellow line) increased significantly in 2015-20 and is facing its second regulatory period of exceptionally higher levels of investment when compared to 2010-15. It is this change that has attracted significant stakeholder interest to understand the benefits that are arising from that level of investment, and to question is the new levels of ICT investment part of a cycle, or is it 'the new normal'?

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<sup>12</sup> Data drawn from SAPN RP, Attachment 5, Capital expenditure

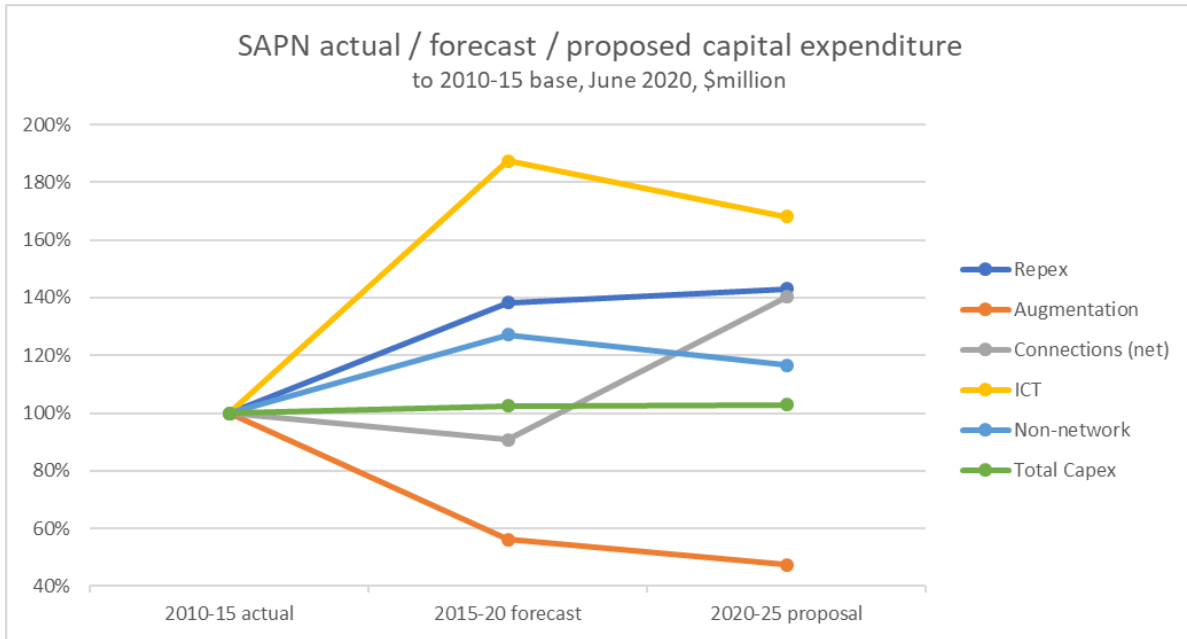


Figure 6: SAPN capex (actual, forecast, proposed) (Source: SAPN RP, attachment 5, table 5-2)

## 6.2 Replacement expenditure (repex)

Capex category \$M \$2020	2010-15 actual	2015-20 forecast	2020-25 proposed	change from forecast	
<b>Repex</b>	477	660	682	22	3.3%

SAPN significantly increased its expenditure on asset replacement in the current regulatory period and is proposing an additional slight increase in the next period.

The proposal for asset replacement capital expenditure by SAPN is detailed and very complex, with a number of factors at play – reliability, safety, asset management efficiency (presented by SAPN as largely ICT-reliant) and long-term risks of underinvestment. In their engagement, SAPN has stressed the relationship between the Asset and Work ICT package and the efficiency of meeting repex obligations.

We note that the AER has chosen to consider poles, a significant component of the SAPN asset base - as unmodelled in their analysis. Given the somewhat unique nature of ‘stobie’ poles, for which consumers have a reasonable expectation would last longer than timber structures, this approach is supported. Equally of note is the way SAPN has chosen to highlight the explicit link between the creation of their proposed Works and Asset Management ICT system and the cost of asset replacement through the new ‘option 1’ repex proposal.

Notable in SAPN’s RP for repex are:

- i) A 12% (\$30M) increase in proposed expenditure on poles and overhead line components in comparison with the initial SAPN regulatory proposal (\$260M to \$290M); which is a 36 % increase on the AER substituted allowance for these components in the draft decision (\$214M)
- ii) Further increases from the initial proposal, although not of the same magnitude, for repex on switchgear, service lines and power transformers
- iii) Reinstatement of repex projects for the Northfield GIS and North Terrace cable ducts after the AER draft decision

- iv) Introduction of new repex trend modelling to support the case for the Works and Asset Management (WAM) – stage 2 ICT capability

Overall, SAPN is proposing a repex investment of \$682M, 2% higher than the initial proposal and 27% higher than the substituted amount in the draft proposal.

### *The Macro view*

Distributors can almost always deliver better network performance, improve public safety and reduce the risk of long-term intergenerational equity of maintaining their assets by investing more money. SAPN's proposed increased expenditure on items such as repex, ICT and network reliability will almost certainly lead to better organisational performance, improved customer amenity and increased public safety. A range of valuation approaches and consultants' reports will demonstrate that the investment is clearly in the interest of some or all parts of the community.

The decision for consumers distils down to considering '*when is enough investment enough?*'

From a top-down view, CCP14 has formed the view that that this approach by SAPN, whilst not unreasonable by any means, may still not reflect strongly enough the community's desire for lower energy prices and a level of cautious restraint in capital expenditure. We base this belief not only on our own analysis, but also observations in passing in some workshops, in conversations with stakeholders both in South Australia and on the national stage, as well as the arguments placed by the AER in the draft decision. Certainly, wholesale prices, retail margins, transmission development and environmental schemes will also have a role to play.

Looking at the capital build-up, we continue to have some concerns with some individual components of the SAPN revised capex proposal, where we believe that SAPN could demonstrate a greater level of restraint. In particular, we support the AER draft decision seeking efficiencies in areas such as the asset replacement, the commitment to 'the best available' ICT systems and the level of connections investment being above that of the original proposal. These issues are discussed in more detail later in this advice.

### *Stakeholder workshop - repex*

SAPN ran a well-attended stakeholder workshop on 25 October 2019 regarding repex to present the AER draft decision and consider their response. CCP14 attended that workshop by telephone, despite a number of technical difficulties. At that workshop, SAPN focussed on the information that the age profile of their assets indicated that, even with improvements in productivity and asset management practices, 'that the current expenditure rate the health of assets and will continue to decline and failure rates will increase'.

SAPN did not dissect the repex to individual line items, nor did it provide quantitative evidence to support that position. The proposed increases in the repex expenditure were not presented at that workshop either.

In addition, the Assets and Work (A&W) initiative was presented. The key objectives of the programme were noted as:

- i) Risk management - Improve SAPN's understanding of the risk the assets pose to customers and community to better target investment
- ii) Programme prioritisation - Ensure SAPN replace assets of highest risk/lowest cost to maintain performance
- iii) Work efficiency - Reduce the costs of replacement work

SAPN highlighted the value of optimising work dispatch and work packaging to improve the efficiency of field crew utilisation as the key benefits of stage 2 of the A&W investment.

We believe the workshop would have been much more effective had SAPN elected to 'put the numbers on the table'. The presentation pack is a little ambiguous regarding the value of the A&W investment and the costs should the package not be implemented. Similarly, the actual costs of the A&W stage 2 was not presented, and investment alternatives were presented qualitatively as 'approximate short-term price impact', whereas core elements of the investment case such as impact on future costs, expected variation in failure rates or alternative resourcing options remained a general, qualitative components of the presentation. Given the depth of understanding of the audience, SAPN could have obtained much more informed stakeholder feedback should more detailed business case data been presented.

That being said, there was cautious support for SAPN using all reasonable resources to manage their assets in a repeatable, data-driven and risk-based approach is supported by customers. SAPN notes this expectation in their stakeholder comments quoted in the capital investment proposal.<sup>13</sup> The issue of intergenerational cost transfer and the smoothing of replex costs was appreciated by the attendees of the workshop, if not generally supported.

On balance, we are supportive of the A&W stage 2 investment.

We cannot see the case of increased replex expenditure however, especially for poles and overhead assets, on the basis that this increase has not been brought to consumer's attention, and the underlying causes and justification for the increased expenditure are not clearly evident.

#### *Replex 'Option 1'*

The additional case presented by SAPN should the A&W package not be implemented, referred to as 'Option 1' is noted. This case had not been presented to customers in any detail, other than a reference in the workshop that to accept the draft decision would result in 'no productivity improvement, increased fire starts, shocks, pole and conductor failures, and higher long-term costs' in return for a \$10 reduction in 'short term price impact'.<sup>14</sup>

We also note that the investment referred to seems to represent an extrapolation of the actual expenditure replex of the past 3 years, the prudence and efficiency of which has not been validated. Customers are also aware that under current levels of expenditure, key performance such as conductor failures, pole top failures or network outage have remained fairly stable, despite the shortfall in capital expenditure evident in the first two years of this regulatory period.

Therefore, we would support rigorous investigation by the AER of the 'Option 1' scenario if it is to be considered with any substance.

#### *A missed opportunity for innovation ?*

SAPN, with the highest penetration of DER in the world and with strong government support, are largely silent on the impact of DER in presenting opportunities to address the challenge of aging assets.

The Assets and Work ICT initiative does resonate in driving lower replex costs through more effective work scheduling, better analysis of asset needs and assisting to prioritise work. These are traditional approaches to field work efficiency and effectiveness, however, and are employed to varying extents by all utilities.

We would expect that SAPN could lever its somewhat unique position in DER penetration and proposed investment in control systems, network monitoring and the like to drive synergies in asset failure risk mitigation, fault response, demand levelling and the like to address the concerns they have regarding asset ageing and failure.

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<sup>13</sup> SAPN RP, Attachment 5, Capital Expenditure, p23

<sup>14</sup> SAPN Replex workshop, 25 October 2019, presentation slide 53

If some of the additional repex was framed as innovation and worked together to drive out synergies from the DER investments, consumers could be more agreeable to the increased expenditure. As it is presented, though, as largely a factor of ‘older assets = more repex’ (paraphrasing the Frontier report document 5.9), it is very hard to support the additional expenditure requested.

### 6.3 Augmentation Expenditure

SAPN has accepted some of the reductions recommended by the AER in the draft decision, seeking a revised augex expenditure of \$331M, down \$59M from the initial proposal.<sup>15</sup>

#### *Distributed Energy Resources*

We acknowledge the additional consideration into the programme carried out by SAPN and noted in their document 5.14 – DER management Expenditure Overview. SAPN also presented that work to stakeholders in a workshop on 1 November 2019. Consistent with other workshops, the content was largely qualitative, however a strong case for better monitoring of the low voltage network was made. Highlighting this issue was the fact that Queensland and Victoria already have effective monitoring of their LV systems.

We continue to lament the slow and uncoordinated implementation of AMI in the NEM. We see AMI rollout as an effective – efficient but not perfect – step forward in managing the future LV network. In light of the poor implementation of AMI in SA, we support SAPN’s revised approach to DER.

We commend SAPN’s work to significantly reduce the cost of LV transformer monitoring.

#### *Capacity*

The workshop discussed the two network 66kV line projects, Myponga and Athol Park. SAPN presented the Myponga line project as squarely targeted at the reliability improvement to a number of communities. The stakeholder group strongly accepted the argument, and supported SAPN’s proposal to proceed with the Myponga project and defer the Athol Park line.

Our analysis is that SAPN has addressed most of the AER’s concerns in the revised business case.

#### *Network reliability*

SAPN is proposing to reinstate almost all proposed investment in network reliability (\$62.9M). Whilst this is not the largest component of the overall capital expenditure that is proposed, it is one that attracts many voices and opinions from the community.

There is no suggestion that investment in network reliability is not important. As seen from the importance of a reliable electricity supply in the recent terrible natural events, networks have a critical role in ensuring a safe and reliable electricity supply through a range of severe conditions. That being said, however, expenditure to improve network reliability falls squarely into the category of ‘when is enough investment enough?’

Stakeholders tend not to see reliability improvement as a compilation of individual actions. The interaction of targeted asset replacement and renewal to new design and equipment standards, vegetation management, actions to improve resilience to severe weather, network ‘black spot’ upgrading, automation and new technologies are all parts of the reliability picture.

From that broader picture, whatever SAPN has been doing to date has resulted in the overall reliability performance of the SAPN network being relatively stable. Similarly, our interpretation of the ESCoSA reliability guideline does not suggest that a significant uplift in investment to improve reliability is needed. More broadly in the NEM, there is a general approach by customers that investment in better network

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<sup>15</sup> SAPN RP, Attachment 5, Capital Expenditure, table 5-32, p43

reliability, as a rule, is not justified by higher prices now or in the future. We also consider that new technologies are fast providing alternatives to network upgrading, particularly in remote areas.

From that point of view, it is difficult to recommend any increase in the historical amounts SAPN has been spending, particularly in light of proposed increased repex spending.

On the other hand, we have observed in SAPN workshops a number of 'loud voices' promoting reliability improvement. In addition, SAPN and some customers have been highlighting the importance of social equity; in this case suggesting that no customer should be particularly disadvantaged in terms of supply reliability<sup>16</sup>. This suggests that there is some support for SAPN's approach to address low reliability feeders.

Therefore, we see some support for a component of the additional reliability investment proposed by SAPN. We cannot, however, support the full amount of the additional investment proposed, in turn encouraging SAPN to make best use of all existing investment options and synergies to meet the challenges they have highlighted.

#### 6.4 Customer Connections

SAPN is proposing an increase in the net connection costs of \$49M (23%) over the initial RP, and \$86M (49%) over that substituted by the AER. In their stakeholder workshop of 1 November, SAPN highlighted that a component of this increase was due to two factors - the change in customer contributions, as a result of a lower WACC and its impact on the Incremental Revenue Rebate (IRR) on connections contributions; and the forecast increased level of new customer connections projects through 2020-25 to 'more historic levels'<sup>17</sup>.

The influence of the changed WACC on connection contributions is noted and accepted.

However, in our observation the advice reflected in the SAPN proposal that the connection activity will be sustained at levels generally higher than the current period has been greeted with a level of caution, perhaps even scepticism. We appreciate the difficulty in forecasting such activity, as highlighted by the significant ongoing conversation between SAPN, the AER and their consultants responding to reports on connection forecasts. We also acknowledge SAPN's supporting document 5.11 - Connections 2020-25 and other data on the matter.

In the SAPN-CCP workshop of 27 November 2019, SAPN provided a graph to that workshop indicating a consistent pattern of under-expenditure of the capital connections allowance for the past two regulatory periods. Such information reduces customer confidence in the robustness of connections forecasting.

Based on these two matters, we are unable to support the increased level of the gross customer connections capital requirement.

#### 6.5 Information and Communication technology (ICT)

SAPN has, on a number of occasions, noted that they are currently in the middle of a very large renewal cycle, and once completed the non-recurrent capital expenditure will be reduced significantly. The large renewal cycle was planned for the 2015-20 and the 2020-25 periods and is being executed as expected<sup>18</sup>. SAPN also note that the overall IT capex forecast will trend strongly downward over the 2020-25 period<sup>19</sup>.

In the DD, the AER has accepted the SAPN proposal for recurrent ICT investment but rejected four of eight non-recurrent programmes. With only a minor exception, SAPN has restated the requirement for all the

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<sup>16</sup> SAPN RP, p9 (customer feedback)

<sup>17</sup> SAPN stakeholder workshop, 1 November 2019

<sup>18</sup> SAPN advice to their SAPN-CCP, 27 November 2019

<sup>19</sup> SAPN RP, Attachment 5, Capital Expenditure, p65



ICT expenditure noted in the original RP, in light of both the 31% decrease in the AER DD and strong customer concerns for the amount of ICT proposed in the initial proposal.

The cornerstone of the justification of the ICT investment is SAPN's assertion that the programmes (Assets and Work, SAP upgrade and ring-fencing) remain critical to SAPN being able to avoid cost increases in future network and IT expenditure. We appreciate and note SAPN's detailed response to our comments of the RP in their addendum to the RP – *the IT Investment Plan Addendum Dec 2019 (p35)*.

Customers continue to find the conversation about ICT costs and benefits difficult to grasp. Eye-watering costs, promises of long-term benefits that will take some time to manifest, the risk of 'unsupported' software in a context of very few system providers and a fast-moving technological landscape mean customers have to revert to some simple and basic concepts of cost – benefit in order to assess any level of support in ICT investment.

### ***Assets and Works management***

Earlier in this advice we have noted guarded support for stage 2 of the Asset and Works package, based on a reasonable linkage between the cost of the system and the nominated benefits in efficient work packaging and crew utilisation. There is still concerns that the benefits of the project may be overstated as the practicalities of the benefits prove challenging. We support the AER examining the real value of the A&W system but provide 'in principal' support all the same.

### ***SAP Upgrade***

The SAP upgrade project remains of concern. Despite information provided by SAPN in the workshop of 21 October, we still feel that the costs of a system that has been nominated by its (largely monopoly) provider as 'unsupported' are being passed to the customer, with SAPN electing to take little risk in maintaining the present system.

SAPN continues to make broad 'scary' statements such as '*If SAP is unavailable for more than 1 hour, this impacts scheduling, outage restoration, critical bushfire management and customer alerts*'<sup>20</sup> We acknowledge that SAP is a critical system for SAPN, but to make these statements without context of the likelihood of this happening, the risk that the critical capability is needed at the time of system downtime and the contingency measures that have and can be taken is essentially misleading. We would expect that SAPN has addressed SAP downtime as a critical component of their Business Continuity Plans (BCPs).

We share SAPN's conclusion that the third-party support market for SAP is limited and see this as an example of the extraordinary power this supplier can exercise in the utilities market.

Our position is not to question whether an upgrade should occur – we see that as inevitable and prudent, despite our concerns regarding the market power of the system provider. Our focus is on the timing and efficiency of the upgrade, linked to SAPN's ability to manage and share the business risks with customers in an innovative and measured way in order to smooth the magnitude of the planned ICT investment in this and subsequent regulatory periods. In the business case<sup>21</sup>, with the support for the existing SAP version not being removed until 2025, we believe SAPN could have examined 'Option 4 – commence the upgrade in 2020-25 but defer the main activities until the next RP' with more vigour. We look to SAPN aggressively seeking business risk control measures that may assist in deferring the upgrade until into the next regulatory period. We also note little reference to risk control measures that would be important should the upgrade not proceed as planned.

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<sup>20</sup> SAPN presentation – IT and non-network capex discussion, 21 October 2019

<sup>21</sup> SAPN SAP Upgrade Business Case Addendum Dec 2019 (redacted)

In addition, we believe that there must be additional business benefits that come from a 'new system', in terms of work efficiencies, new functionality, integration with existing related systems and more flexible data management and analytical capability. SAPN may have underestimated the benefits of such a system in both operating productivity and capital efficiency. The 0.5% productivity to be delivered may be considered part of this investment.

## 6.6 A register of commitments regarding future costs and savings

Throughout SAPN's proposal, and particularly related to capex, SAPN makes references to investment requirements and influences beyond the 5-year horizon of the regulatory reset period. Examples of these commitments include:

- i) additional expenditure for repex to reduce asset maintenance future costs
- ii) 2020-25 investment in ICT as a 'peak of the cycle' of recurrent expenditure
- iii) Long-term benefits of improved ICT systems, in particular Assets and Work
- iv) The ability to increase DER hosting capacity with better knowledge of LV networks

We acknowledge and continue to vigorously support the AER's position to require post-implementation reviews of major ICT investment. Similar to monitoring for repeat proposals for network augmentation or specific repex projects, we do encourage the AER to keep track of these commitments made in the proposals and actively consider them in future reset periods.

## 6.7 The Long-run implications of repex (supporting document 5.9)

SAPN has provided this document in support of the conversation regarding the proposed asset replacement capital (Repex). This document was not discussed in any detail in consumer forums, however the general premise of an emerging 'bow wave' of repex expenditure has featured in a number of consumer workshops.

As a basis for its arguments, the report presents four propositions that are 'considered to be uncontroversial'. These propositions are (paraphrased):

1. Repex requirements will not grow smoothly over time,
2. A lower level of replacement investment will lead to more asset failures,
3. 'Run to fail' replacement strategy is more costly in the long run than scheduled replacements, and
4. Every asset will eventually need to be replaced, it's just a matter of when

On the basis of these fairly simple sweeping statements, this approach is quite supportable. However, Frontier use the term 'all other things being equal' in their logic statements in developing a 'simplified age-based modelling approach'. The thing is, in today's electricity industry, all other things are not equal. The technical, commercial and social environment in which utilities operate are under a high level of 'disruption', where alternatives and changing expectations are commonplace and continuing to emerge.

In developing the scenarios, the report fails to properly acknowledge that there are many dynamic factors in areas such as risk analysis, bushfire mitigation, distributed energy resources, new asset technologies and operational productivity that are available, or are emerging and may be 'over the horizon'. The report does not consider these factors in promoting new ideas, innovation and the role of non-network options in seeking a 'thinner' network in the face of growing energy options and the risk of significant cost impacts of growing asset values.

Other comments on the report are:

1. The consequence and impact of failure can be variable, change over time and be managed in different ways. Impacts of failure can be influenced by innovation, efficiencies and a wide range of risk-management factors. New technologies exist where the consequences of failure can be mitigated or significantly reduced, such as DER and energy resources ‘behind the meter’, advanced inspection and testing techniques and changes to network topology. DER and stand-alone power supply can mean customers can tolerate asset failure with reduced reliability risk.
2. Run-to-fail for some assets can be a valid approach, provided the risk of failure can be reasonably managed.
3. Just because an asset is old, does not mean it will fail. The usage patterns, regular inspection and environmental conditions mean assets of varying age will be of very different conditions. Targeted and prioritised responses are encouraged.
4. As technology progresses, new methods of efficiently and effectively inspecting and maintaining assets mean the age profile–failure risk link can change significantly over time.
5. Productivity improvements, changes to work practices and new material choices can mean a replacement asset may not be ‘like for like’, and cheaper and more innovative options could exist (e.g. composite crossarms, spun concrete poles)
6. It is valid for the AER to address SAPNs concrete / steel poles as a specific unmodelled asset class, as it is very different in performance over time, susceptibility to environmental conditions and failure modes.

In the workshops, consumers noted the risks, but also suggested that deferring replacement it is not always a bad thing. As noted above, future generations tend to be richer and have better technology. This technology opens up new options that were not available in the past or at least not in a cost-effective form.

We need to ensure there are “no regrets” investment decisions so that these future generations are not paying for stranded assets at a much higher WACC than current levels.

## 7 Other matters arising from the engagement

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### 7.1 Equity, opportunity and balancing investment

As part of the difficult task of balancing keeping prices down, maintaining safety and reliability and transitioning to the new energy future, SAPN highlights the increasing average asset age of its network and the need for a planned approach to replacement. SAPN comments <sup>22</sup>:

*“It also is not equitable for us to “kick the can down the road” as our stakeholders now categorise the very real risk that by deferring expenditure on an ageing network today, we push additional costs onto future years and onto the next generations of customers.*

The Draft Decision reduction in capex is the biggest issue that SAPN seeks to address in its Revised Proposal.

Whilst a focus on investment to enable the transition to a new energy future is understandable, consumers are concerned that if the rapid technological change that has occurred in recent years to enable that transition to continue at the same pace, then new 30/40/50 year assets might have a high probability of becoming stranded well before the end of their life.

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<sup>22</sup> Revised Proposal p.iv

Also, the issue of intergenerational equity can be an imprecise concept. SAPN, referring to the Draft Decisions capex cutback said <sup>23</sup>:

*“These decisions would not only increase risk but would inevitably pass on more costs to future generations. This inter-generational equity issue is a key concern for SA Power Networks and our stakeholders.”*

### *Future wealth*

There is one school of thought that suggests it is not always a bad thing to push some costs on to future generations. Historically, future generations have been richer than those who came before, with one important reason being that they have access to more sophisticated and cheaper technology. Given the large fall in the costs of renewable generation, getting to the existing level of renewables penetration at today’s capital costs would have been significantly cheaper than the actual costs incurred at historical costs.

### *New technologies*

We should not assume that just because something is old it needs to be replaced with like for like. For instance, technological change is making standalone power systems much more competitive with the conventional (and expensive) approach of replacing SWER lines. In this age of rapidly developing energy technologies, perhaps in the near future the challenge of low network reliability in remote areas can be met by new technologies that are provided and operated by someone other than the local network service provider.

It is a balance between a fair allocation of costs over time and not wanting to leave future generations with paying for stranded legacy assets (at a potentially much higher WACC when the interest rate cycle changes over their 30/30/50 year life) when they have developed much more efficient means of addressing the issues.

The conversation then shifts to long-term capital investment needed to maintain a viable, responsive and safe network.

### *Long-term impacts of investment*

Capital investment does not have an immediate significant impact on electricity bills; however, the future price risks of a large regulatory asset base and the possibility of long-term investments that may not be consistent with a rapidly-changing energy landscape are very much front-of-mind for informed stakeholders.

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<sup>23</sup> Revised Proposal Overview p. 12

## 8 Tariff and pricing proposals (TSS)

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CCP14 joins the AER in commending SAPN for its Tariff Structure Statement (TSS). We note the TSS has been accepted by the AER and has also received positive comments from stakeholders and customers alike.

We welcome the approach that recognised customers' requests for simplicity and a level of empowerment in managing electricity bills. The removal of the Critical Peak Pricing and block tariffs for customers with accumulation (type 6) meters whilst maintaining compliance with tariff rules is appreciated, and reflects the issues raised in consumer workshops.

We are particularly impressed by the way SAPN has:

- a) Provided a clear linkage between the changing network demand patterns and the way tariffs are targeted to address these challenges
- b) the sensitivity analysis SAPN has undertaken to consider the impact of changing energy throughput
- c) recognition of off-peak controlled load as an important component in the overall tariff offering to retailers and subsequently consumers
- d) the presentation of tariff options to retailers to encourage the engagement of retailers in presenting an innovative, appropriate energy tariff options to consumers.

The missed opportunity in accelerating the uptake of advanced metering infrastructure in South Australia may in some ways be addressed through connection policies and new metering associated with DER uptake in the state.

CCP14 was able to observe the SAPN TSS presentation to retailers in Melbourne on 15 November. The implications of the TSS in the context of the Default Market Offer was discussed, and the way SAPN was presenting the tariff implications to retailers was commendable. The retailers present did not identify any significant concerns or issues in the workshop. In fact, the retailers said little at all, which is generally par for the course in tariff workshops with retailers.

Unlike the TSS workshops in Queensland, we are not aware of SAPN running targeted TSS engagement for various industry cohorts. Following their TSS engagement with stakeholders though, we do note that SAPN has established a Residential and Business Tariff Working group to assist the implementation of the tariffs post – 1 July 2020. SAPN is to be commended for that initiative.