Energy Consumers Coalition of South Australia

Australian Energy Regulator

SA Electricity Distribution Revenue Reset

The AER preliminary decision

A response

by

Energy Consumers Coalition of South Australia

June 2015

Assistance in preparing this submission by the Energy Consumers Coalition of SA (ECCSA) was provided by Headberry Partners Pty Ltd.

This project was part funded by the Consumer Advocacy Panel (www.advocacypanel.com.au) as part of its grants process for consumer advocacy and research projects for the benefit of consumers of electricity and natural gas.

The views expressed in this document do not necessarily reflect the views of the Consumer Advocacy Panel or the Australian Energy Market Commission.

The content and conclusions reached are the work of the ECCSA and its consultants.

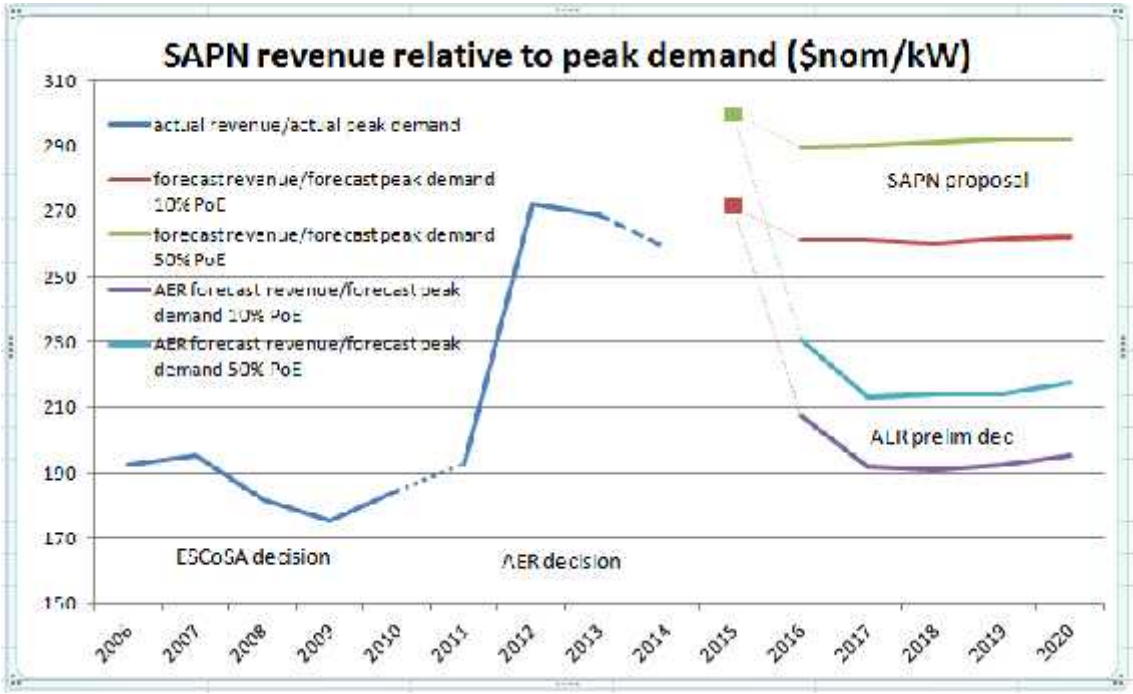
CONTENTS Page

Executive Summary

The Energy Consumers Coalition of SA (ECCSA) welcomes the opportunity to present its views on the AER preliminary decision on the proposal by South Australian Power Networks (SAPN) for a reset of the electricity distribution costs in South Australia.

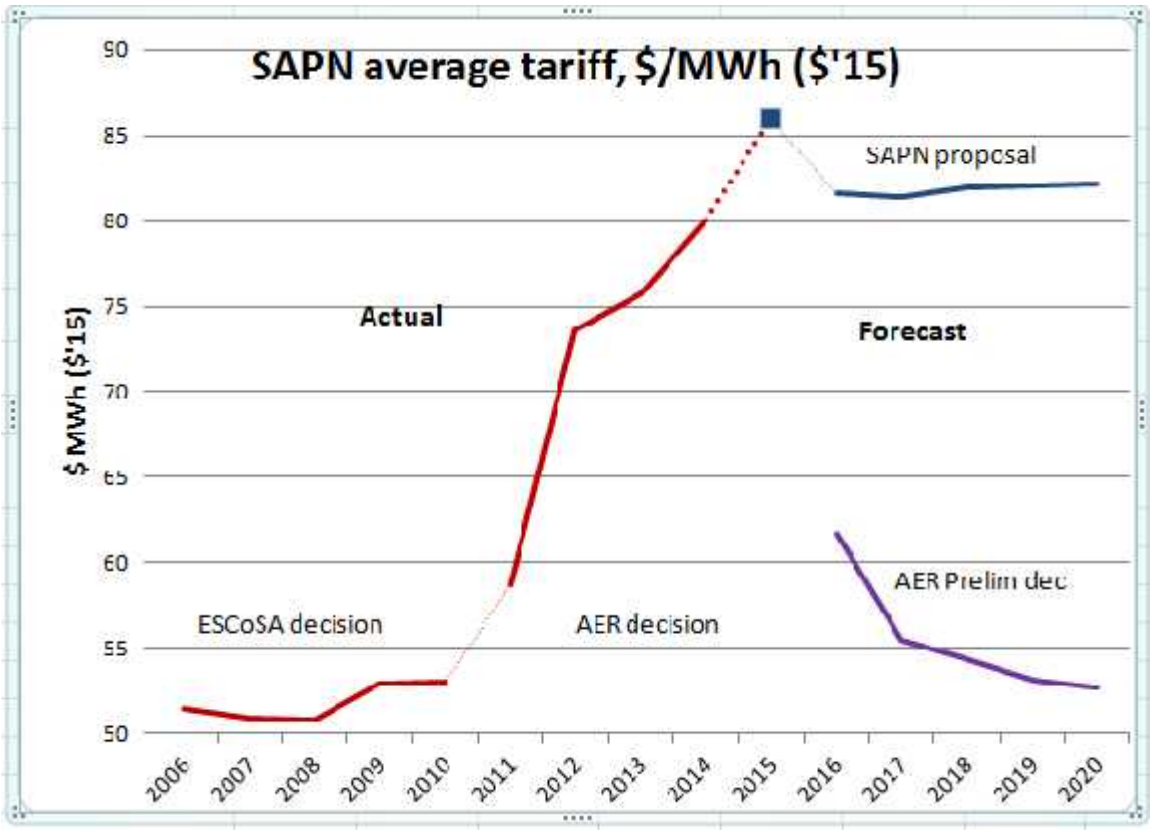
The ECCSA noted that the proposal from SAPN resulted in an increase in allowed revenue from the current level and that pricing of SAPN services would show little movement from present levels despite a significant fall in expected peak demand (compared to previous actual peak demands) and falling consumption. The ECCSA expressed a view that the SAPN revenues should fall from the current levels, rather than increase. With this in mind the ECCSA notes that the AER preliminary decision does provide consumers with a significant reduction in the revenue allowed to SAPN, and which is more in line with consumer expectations.

The ECCSA notes that as demand is the main driver of a network's cost, when SAPN revenues were assessed relative to the historic peaks and expected peak demands for the forecast regulatory period, then their costs per kW are increasing. Conversely, when the allowed revenues in the AER preliminary decision are converted on the same basis, the outcomes show a return towards the revenue/kW seen in the regulatory period before the current period. These forecasts are shown in the following chart.



Source: SAPN application, SAPN economic benchmarking data templates, SAPN benchmarking RIN 2013/14, AER preliminary decision

The ECCSA notes that the expected average tariff based on the SAPN forecast revenues exhibited a small increase from the average tariff applying for the base year but a small reduction from the average tariff for the final year of the current period. In contrast the AER preliminary decision results in an average tariff similar to those that applied some 4-5 years ago. These observations are shown pictorially in the following chart.



The two foregoing charts display the ECCSA view that the SAPN proposed revenues are excessive and contradict the SAPN assertion that its prices would not increase from current levels[1].

It is clear that on this comparative basis, the revenues claimed by SAPN are significantly overstated. Further, the massive increases in revenues over the current period have caused significant cost increases to consumers; the AER preliminary decision delivers an outcome which is much closer to historical costs and therefore much more appropriate for consumers while still delivering sufficient funds for SAPN to provide the reliability in service expected by consumers.

[1] A review of the tariffs developed from the SAPN forecast revenue shows that tariffs for small consumers might be much the same as current tariffs, but those for large users show a marked increase

In its response to the SAPN proposal, the ECCSA investigated the reasons why the SAPN revenues showed such an increase when falling demand and consumption would imply a need for less revenue. The AER preliminary decision goes further than the ECCSA analysis but still supports the ECCSA views that the proposed revenues by SAPN were greatly overstated.

Both the ECCSA and AER assessments conclude:

- SAPN grossly overstated its weighted average cost of capital and did not follow the AER guideline on the development of the rate of return.

  The ECCSA considers that the ignoring of the AER WACC guideline demonstrates inconsistency with the SAPN assertions that it seeks to reduce the cost imposts on consumers for providing network services.

- SAPN significantly overstated its needs for opex. The claims for opex step changes were seen as ambit and in some cases totally inconsistent with what the rules allow for inclusion for opex costs.

  Whilst the AER assesses that the SAPN base year opex as being efficient, the ECCSA considers that the AER view is conservative as it is clear that SAPN productivity has fallen considerably in the past eight years and at a rate more than twice the loss of productivity seen in other comparable networks.

- SAPN significantly overstated its capex needs.

  Despite demand and consumption showing little signs of increasing, SAPN made a claim for a large increase in augmentation capex - a claim inconsistent with expectations of future demand - the key driver of augex. The AER preliminary decision reflects the ECCSA view that augex should be significantly less than that used in the current period.

  A major difference in view between the ECCSA and AER on augmentation capex relates to the AER acceptance of installing a duplicate undersea cable to Kangaroo Island even though the current cable has considerably more economic life remaining; this means the second cable is merely a backup. The ECCSA considers that the AER should have not included the second cable as a firm capex allowance but should have included the duplication as a contingent project, to be allowed when all options for provision of back up had been investigated through the RIT-D process that has to be undertaken. Including the allowance prior to the RIT-D process provides SAPN with the opportunity to reap an unearned reward from the CESS incentive should the RIT-D result in a decision not to proceed with the project. .

SAPN is of the view that major investment is required in replacing assets that are excessively old and/or in poor condition. The AER preliminary decision provides an allowance continuing the trend of the actual repex in the later years of the current period, at a level considerably less than that sought by SAPN. The ECCSA considers that the AER has probably overstated the need for this amount of repex and has applied too much conservatism in its assessment.

SAPN had sought significant amounts of capex for "safety" reasons. In fact, the issue of safety does not relate to the safety of the network but the capex was to address extensive bushfire mitigation and road safety and reflected supposed consumer support for this work at the expense of electricity consumers. Neither of these projects were sought by the SA government. Neither the ECCSA nor the AER consider that these projects are appropriate for inclusion as there is no regulatory requirement and were only supported by a supposed willingness to pay as assessed by SAPN consumer engagement. Neither of the ECCSA and AER consider that the SAPN willingness to pay process is robust.

- The pricing methodology being proposed by SAPN is of great concern to ECCSA as there appears to be inconsistency about the allocation of costs to the different sectors, resulting in perverse tariff outcomes.

Overall, the ECCSA considered the SAPN proposal would not deliver the outcomes for consumers that they were expecting from the current low cost of capital environment. The AER assessment confirms this view.

The ECCSA would also comment that it considers the AER review to have been the most detailed assessment of SAPN proposals ever undertaken for this distribution network.

In carrying out its review the AER has used the full suite of regulatory rule changes to drive its assessment of the SAPN proposal and as a result has concluded that much of the proposed increases sought by SAPN have little or no validity when assessed under the new rules and the resultant guidelines.

1. Introduction

1.1 The ECCSA

The Energy Consumers Coalition of SA (ECCSA) is a forum representing large energy consumers in South Australia. The ECCSA is an affiliate of the Major Energy Users Inc (MEU), which comprises some 20 major energy using companies in NSW, Victoria, SA, WA, NT, Tasmania and Queensland.

The ECCSA welcomes the opportunity to provide comments to the AER's review of the revenue reset for the South Australian electricity distribution system, especially to the AER preliminary decision on the SAPN proposal.

1.2 The scope of this review

In its response to the SAPN proposal, the ECCSA noted that this reset review is being undertaken in a period where there is considerable stress on electricity consumers as the cost of electricity has risen dramatically in recent years.

The ECCSA observes that the AER has used the full suite of regulatory rule changes to drive its assessment of the SAPN proposal and as a result has concluded that much of the proposed increases sought by SAPN have little or no validity when assessed under the new rules and the resultant guidelines.

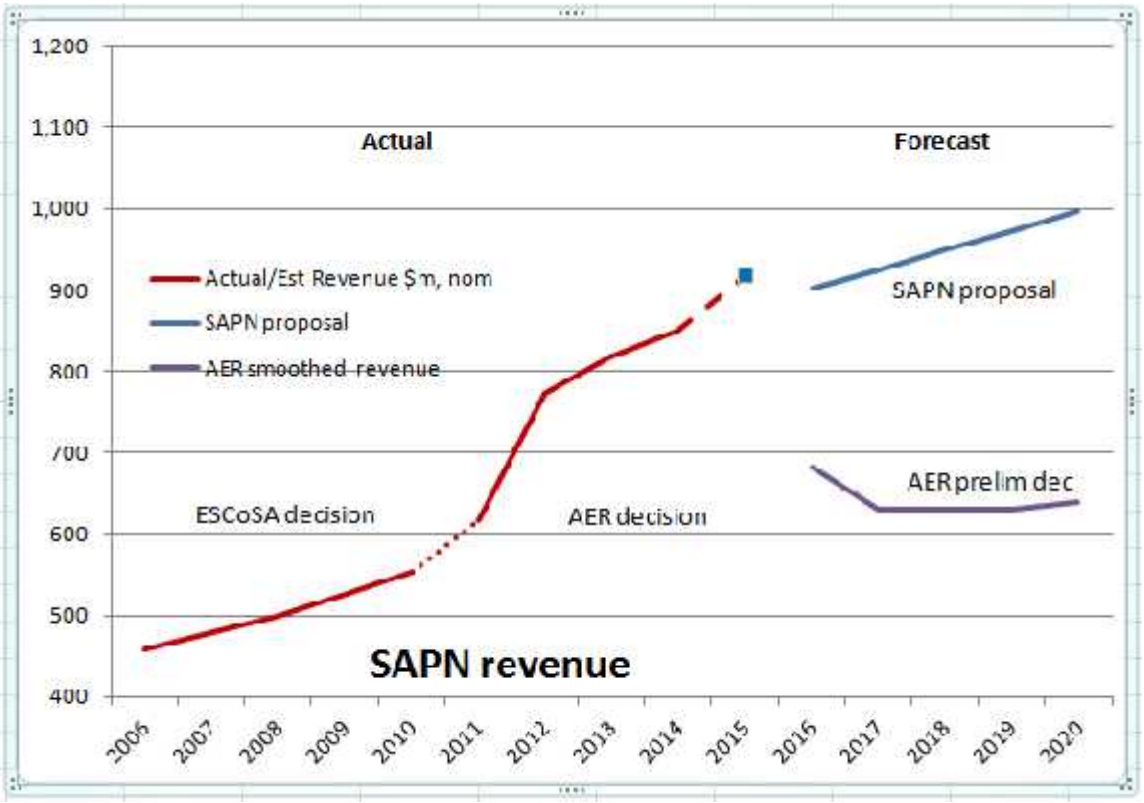
Overall the ECCSA considers that the AER has carried out one of the most detailed assessments of SAPN proposals ever undertaken for this distribution network.

1.3 An overview of the SAPN application and the AER preliminary decision

In its proposal, SAPN forecast a revenue requirement that continued the massive increases seen during the current period, as the revenue forecast for the next period showed further increases from previous years.

In contrast, the AER preliminary decision reduces the forecast revenue to levels similar to those applying before the massive hike in annual revenue seen throughout the current period.

The SAPN actual revenues, the SAPN forecast revenues and the AER preliminary decision revenues are shown on the following chart.



Source: SAPN application, SAPN economic benchmarking data templates, SAPN benchmarking RIN 2013/14, AER preliminary decision

By and large, the ECCSA considers that the approach used by SAPN "locked in" the excessive cost structure made in the current period whereas the AER preliminary decision results in revenues much more in line with historic revenues seen before the very high revenues seen in the later years of the current period.

The lower revenues allowed by the AER reflect a number of very important aspects:

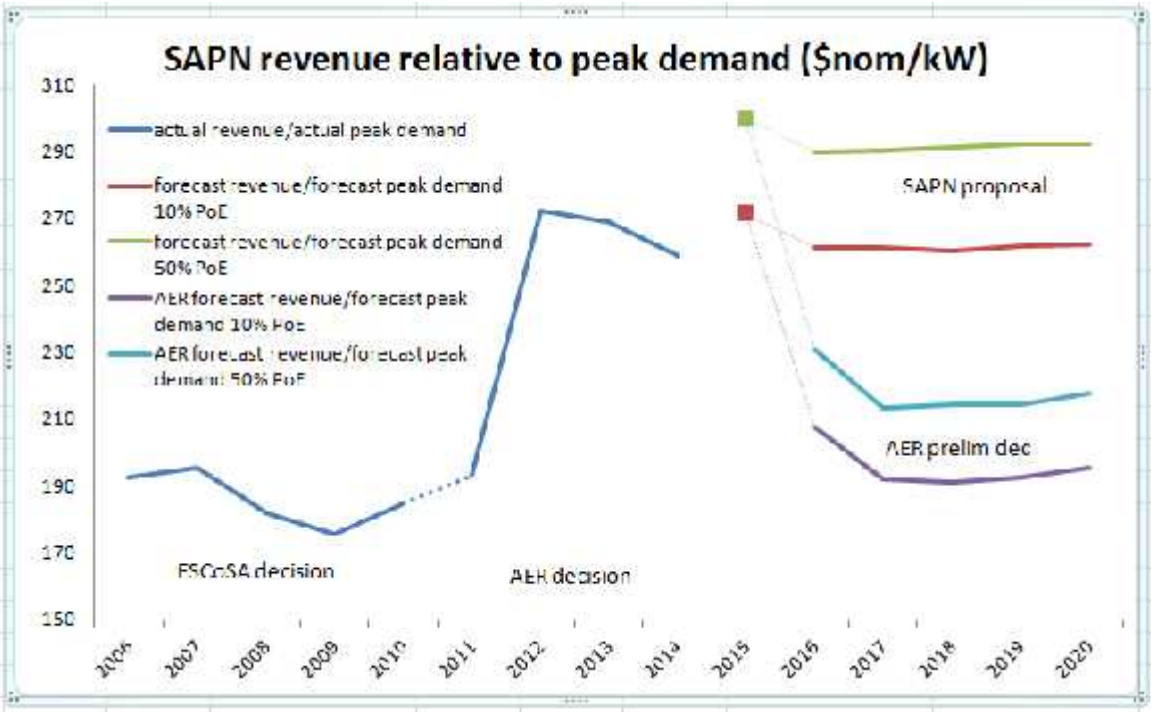
- Demand and consumption are essentially static
- Lower costs of capital apply at this time
- Current levels of opex and capex are sufficient to maintain reliability and accommodate the small increases in demand seen in some locations in the SAPN network

1.4 The helicopter view

In its proposal, SAPN provided a view that its prices would fall marginally in nominal terms at the start of the new period and thereafter increase by CPI for the rest of the period.

The ECCSA was doubtful at this assertion and developed an assessment based on expected increases in demand which is the main driver of network costs. As demand is measured in terms of average (50% PoE) and peak (10% PoE) the ECCSA approach plotted the forecast revenues in relation to these two measures, along with the actual revenues and actual demands seen in the past. The ECCSA has also included the AER preliminary decision revenues related to the same 50% PoE and 10% PoE estimates.

These calculations are shown in the following chart[2].



Source: SAPN application, SAPN economic benchmarking data templates, SAPN benchmarking RIN 2013/14, AER preliminary decision

What the chart shows clearly is:

- The SA state regulator (ESCoSA) decision in 2005 which provided reasonably stable prices for the period prior to the current period
- The impact of the high revenues sought by SAPN for the current period and allowed by the AER decision in 2010, compounded by the falling peak demands and consumption seen in the current period
- The impact of the flat demand expectation for the next period and the high revenue sought by SAPN for the next period

[2] To develop these trends, the ECCSA has accessed data from the expenditure RINs and combined this with the sought after revenue and the expected overall demand deduced from the SAPN proposal. Where the information was not readily available the ECCSA had to make some assumptions, particularly in relation to the revenues and demand at the end of the current period.

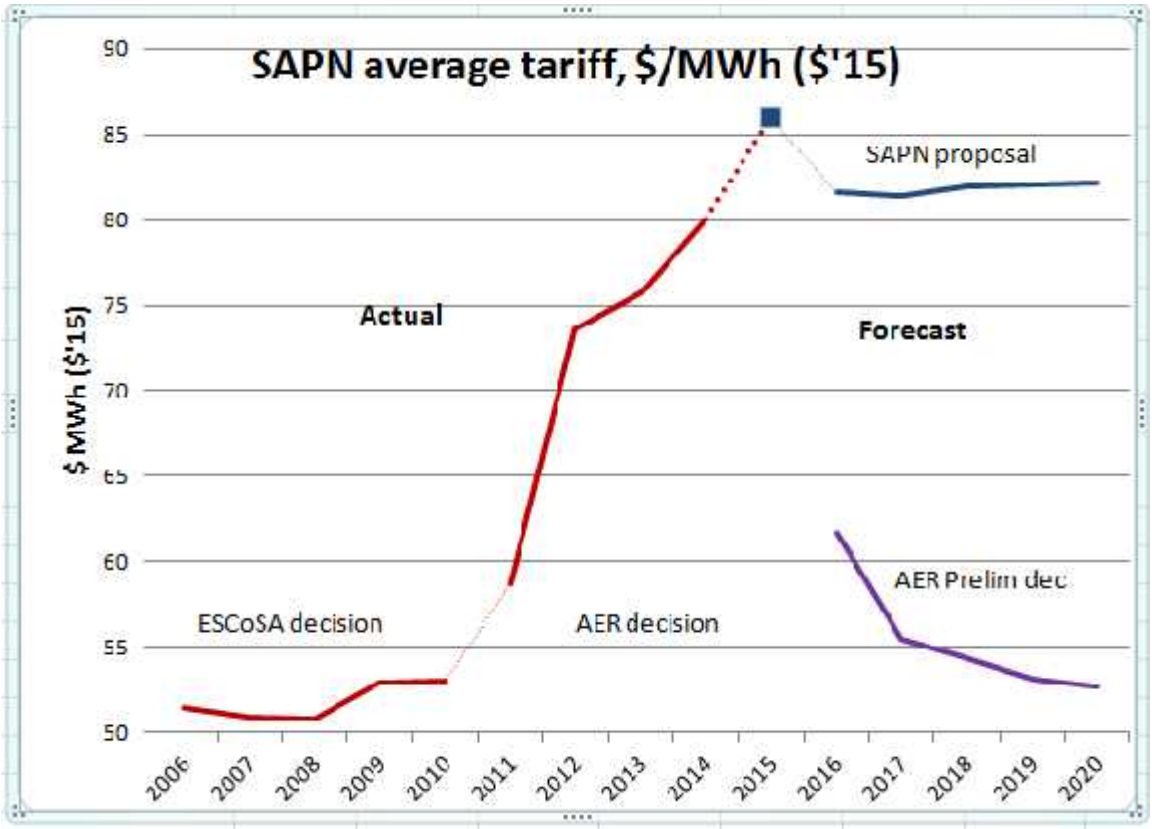
- The impact of the flat demand expectation for the next period and the reduced revenue allowed in the AER preliminary decision

This chart shows that the assertions by SAPN that prices would fall is not borne out by the facts. It also shows that the AER preliminary decision does not lead to the prices seen in the earlier years of regulatory decisions unless the expected demand in each year is at 10% PoE levels[3].

The ECCSA considers that the 50% PoE assessment is a more likely outcome for most years.

It is interesting to note that using the 10% PoE for peak demand, the SAPN revenue basically maintains the current very high prices for consumers whereas the AER preliminary decision prices returns prices back to those applying before the massive increases seen in the current period.

The ECCSA has also developed the following chart showing the average tariff based on historic revenues and consumption and the forecast revenues and consumption.



Source: SAPN application, SAPN economic benchmarking data templates, SAPN benchmarking RIN 2013/14, AER preliminary decision

[3] The concept of 10% PoE implies that the peak demand on this measure will occur once in every 10 years, so there is every expectation that the outcome will not be realised.

This shows that the expected tariff based on the SAPN forecast maintains prices at the level seen in the base year used for opex (ie 203/14 year). The increase in average tariff by over 50% in real terms over the passage of the current period must be considered excessive by any reasonable measure, and for this increase consumers did not receive any additional benefit above what they received as the start of the period. So for the same service, consumers faced real increases of over 9% pa. Consumers question the equity in such increases.

As noted in section 1.6 below, the ECCSA questions whether, in the willingness to pay work carried out by SAPN, whether the consumers providing input to the surveys were made aware that the maintenance of the high tariff was despite the very low cost of capital currently extant, and that when the cost of capital returned to its long term levels, consumers would see a significant increase in tariffs to pay for the large amounts of discretionary investment that was being proposed by SAPN.

In contrast the AER preliminary decision results in the average tariffs reverting to those seen in the period prior to the current period, and before the massive growth in SAPN revenues seen during the current period.

At a high level, with the current low cost of capital, there is an expectation that the average tariff should fall if forecast demand and consumption is to remain flat. This is what the AER preliminary decision achieves and this provides high level support for the decisions made by the AER and highlights that the SAPN proposal is excessive.

1.5 Consumer engagement

The ECCSA is delighted that the SA Power Networks (SAPN) decided to actively engage their consumers and "address the concerns identified though the course of consumer engagement"[4]. ECCSA notes that SAPN is continuing with its consumer engagement and ECCSA has participated in some of these activities subsequent to the submission by SAPN of its proposal.

It is important to note in its preliminary decision the AER has recognised that SAPN has undertaken a considerable amount of consumer engagement, but also that the AER has recognised that the consumer engagement purporting to support significant increases in capex and opex has evidenced some significant shortcomings. Based on these shortcomings, the AER preliminary decision has not allowed these opex and capex claims by SAPN to be included in the allowed revenues. The ECCSA supports the decisions of the AER in this regard

[4] SAPN proposal page 57 – 'Our customer engagement'

and agrees with the AER conclusions that the consumer engagement was insufficient to support the claims made by SAPN.

One of the more contentious elements of the consumer engagement process undertaken by SAPN is the willingness of consumers to pay for certain supposedly consumer driven investments. The ECCSA is very much aware of the cost pressures on its members of the large increases in costs seen over the current period and they advise that they were not supportive of increased costs for these investments.

Further, the ECCSA has noted that there are considerable numbers of consumers in South Australia that are having extreme difficulty in paying for the current level of investments, let alone the discretionary investments that SAPN considers would be "nice to do" on the basis of supposed consumer support. As network charges are the single biggest element of the total electricity supply chain costs, the ECCSA finds it difficult to accept that these consumers are willing to pay more when they have great difficulty in even paying current costs.

As noted in its response to the SAPN proposal, the ECCSA has been exposed to a number of consumer engagement processes. The upshot of these is that ECCSA considers that the consumer engagement process still leaves considerable doubts about what consumers are willing to pay for as the context and detail provided in discussion about these discretionary projects are couched in insufficient detail for consumers to make a fully informed decision.

The ECCSA considers that the AER position on these discretionary investments is appropriate and supports the AER in excluding them form the allowed revenue.

1.6 Shared assets

The ECCSA notes that SAPN provides services to others using the assets fully funded by consumers and therefore consumers should receive a benefit from this additional use. SAPN advises that it expects to receive nearly $10m pa from others using assets effectively funded by consumers. SAPN proposed that, following the AER guideline, it had to give to consumers less than $1m per year for the first three years only.

The AER has determined that SAPN calculations were incorrect, especially when compared to the AER preliminary decision on allowed revenues, and the AER considered that consumers should be receive some $4.1m over the five year period.

This calculation highlights the absurdity of the AER guideline where SAPN retains 90% of the revenue it gets from doubling up on the use of assets funded

by consumers. The ECCSA considers that at least consumers should receive a benefit equal to that received by SAPN.

It is also worth highlighting that the revenue SAPN retains from duplicated use of the assets could be used to fund the duplicate undersea cable and a significant proportion of the discretionary projects that SAPN considers should be implemented.

1.7 Summary

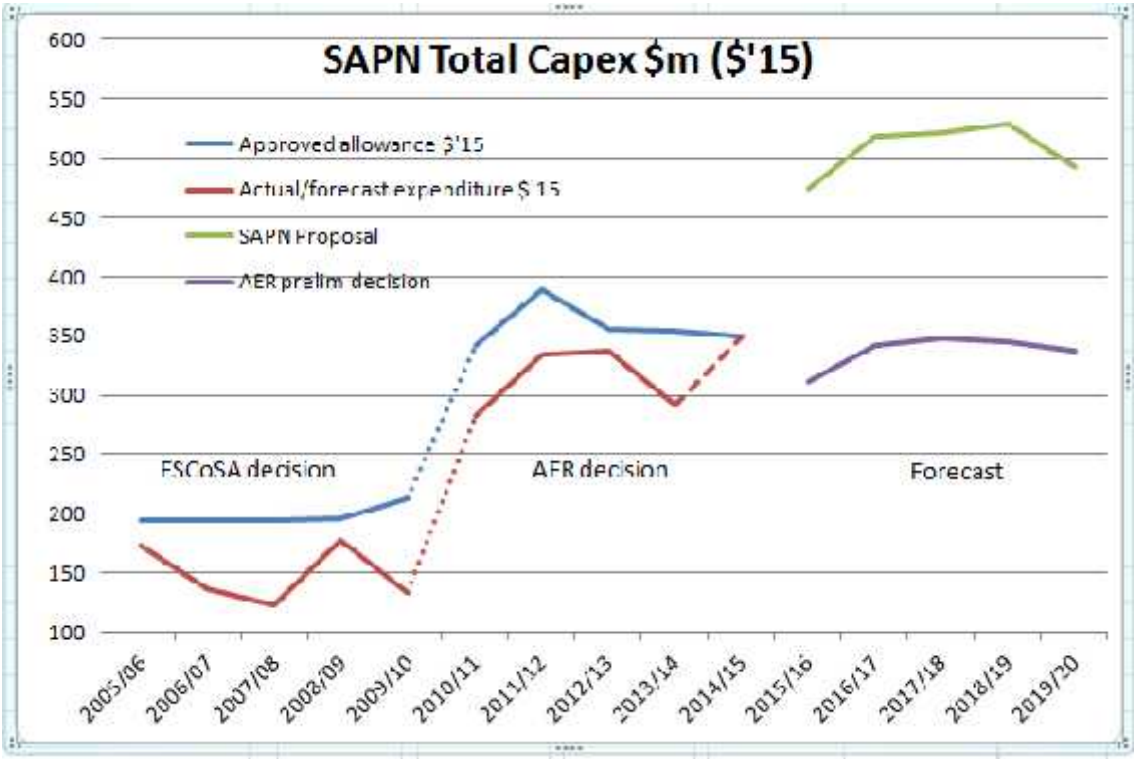
The proposal by SAPN was seen as excessive by consumers and maintained excessively high costs for consumers to continue to pay.

In contrast, the AER preliminary decision returns costs to consumers to levels seen during the period prior to the current period where massive increases in costs occurred for no benefit to consumers.

The AER preliminary decision incorporates the current low cost of capital but when costs for capital return to long term averages, consumers will still see than are necessary as a result of the breakout of costs seen during the current period.

2. Total Ex-Ante Capital Allowance

The following chart provides a view of SAPN capex over the long term - actual and allowed costs - as well as the capex forecast for the next period and the AER preliminary decision



Source: SAPN application, SAPN economic benchmarking data templates, SAPN benchmarking RIN 2013/14, AER prelim decision

This shows that overall, SAPN did not use all of the capex allowance granted it in the previous and current periods. At the last reset the AER granted SAPN an 80% increase in capex primarily on the basis that there was expected significant need for augmentation. The preliminary decision for the next period provides SAPN with a capex allowance only marginally less than what was provided for the current period of which about half was for augmentation. As some of the augmentation capex was never used, this allowed SAPN to garner a significant increase in profit.

The 2014 and 2015 AEMO forecasts for peak demand and consumption (NEFR) for SA shows that there is little expected growth in peak demand for the next period so no new demand driven capex should be required. Yet this is not the outcome the AER has included for in its preliminary decision. In fact, the AER has accepted that the current period capex should be maintained despite there being little expected growth and a forecast peak demand still well below the levels seen in 2009 and 2011.

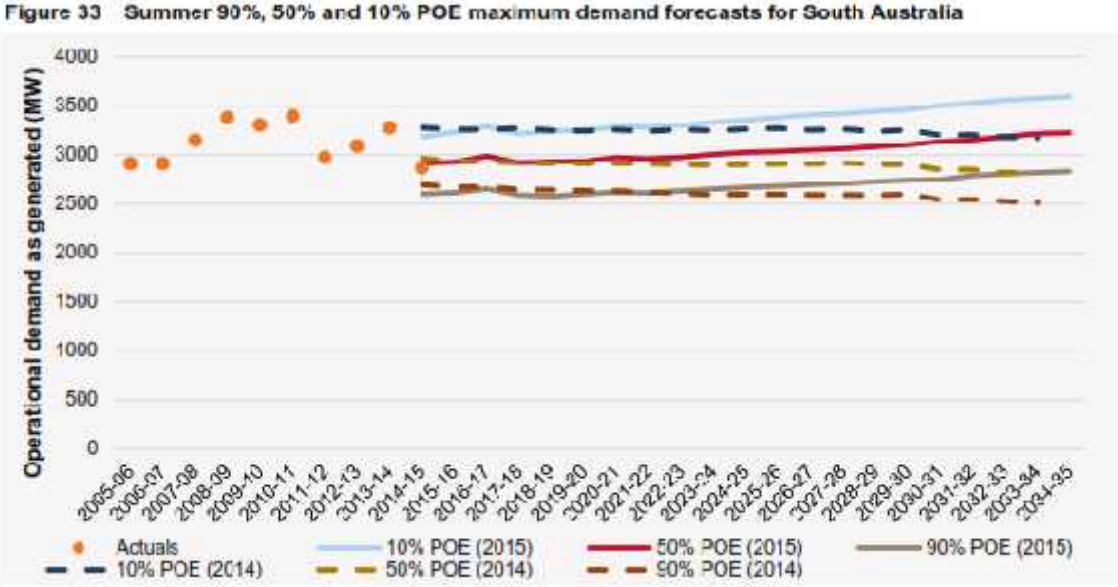
At a high level, the ECCSA considers that the AER has provided a greater allowance for capex than is needed in light of the apparent need for little or no augmentation capex.

A most concerning aspect of a number of observations made by the AER in their assessment of a prudent capex allowance revolves around the lack of justifying documentation from SAPN to support various capex proposals. The ECCSA notes that the AER identified that many of the proposed investments were not supported by the rigorous justification that is expected by prudent management - this particularly is evidenced in the AER assessment of the building and property capex. The lack of appropriate supporting evidence highlights that SAPN internal management has not been rigorous in applying standard approaches to capex justification. This raises an important issue as to where else has SAPN internal management been equally lax and permitted the regulatory proposal to include capex that is not supported by careful and justifiable reasons for seeking the capex. The ECCSA considers that the AER should raise this issue with SAPN.

2.1 Augmentation Capex

In its response to the SAPN proposal, ECCSA commented that based on AEMO 2014 NEFR that the forecast demand in SA was expected to remain flat. The recently released 2015 NEFR continues with this view although AEMO forecasts that demand in SA is only likely to reach the 2009 and 2011 peak demand levels by the late 2020s as the following chart shows.

Figure 33 Summer 90%, 50% and 10% POE maximum demand forecasts for South Australia



Source: AEMO 2015 NEFR

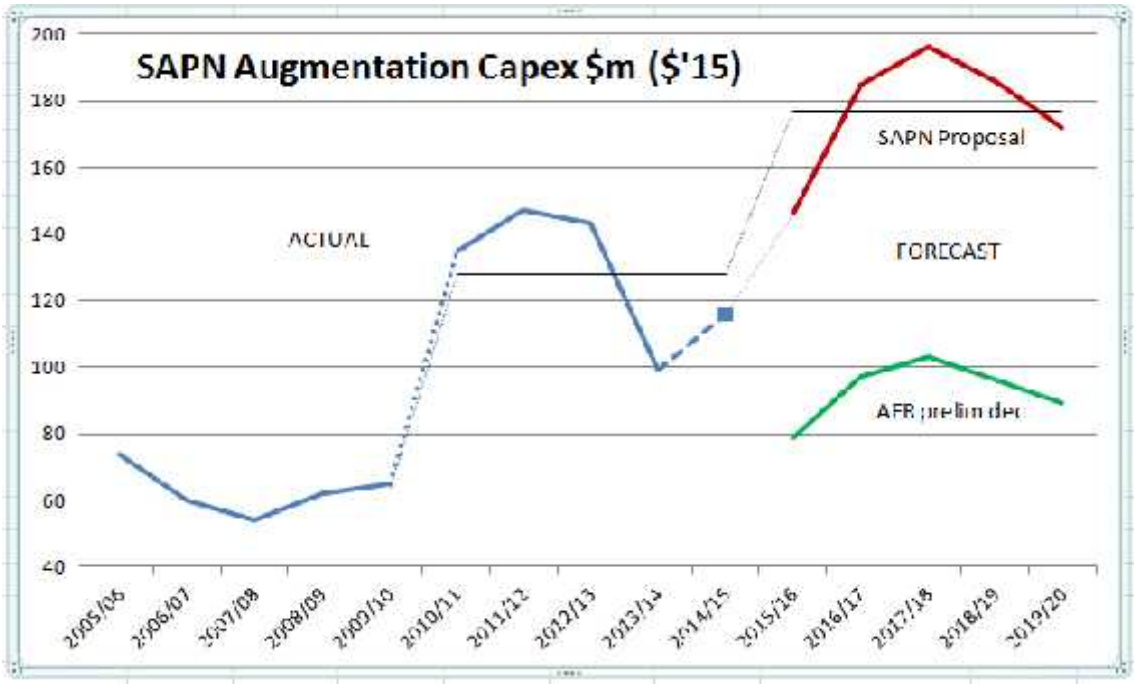
The chart provides the expectation for demand measured both as a 50% probability of exceedance (PoE) - the average expectation - and the 10% PoE -

the expectation at the high end of demand. Even at the 10%PoE the expected peak demand for the coming regulatory period does not exceed the actual peak demands recorded in 2009 and 2011. In fact, the chart shows that peak demand will not exceed historic levels until the late 2020s. On this basis, there is an expectation that there will be no need for any augmentation capex for the next period.

This means that the most recent AEMO forecast does not provide a reason to increase augmentation capex for the next period.

ECCSA observes that the capex allowed for the current period was based on an expected significant increase in demand and because of this about half of the capex allowance for the current period was for augmentation.

However, despite there being no apparent need for any augmentation based on there being no expected increase in demand above historic levels, AER has accepted considerable augmentation capex should be allowed, although somewhat less than was actually incurred in the current period.



Source: SAPN application, SAPN economic benchmarking data templates, AER preliminary decision

What is concerning is that in the period before the current period, actual augmentation capex was less than what the AER preliminary decision provides for the next period, even though there was considerable growth in the 2005-2010 period.

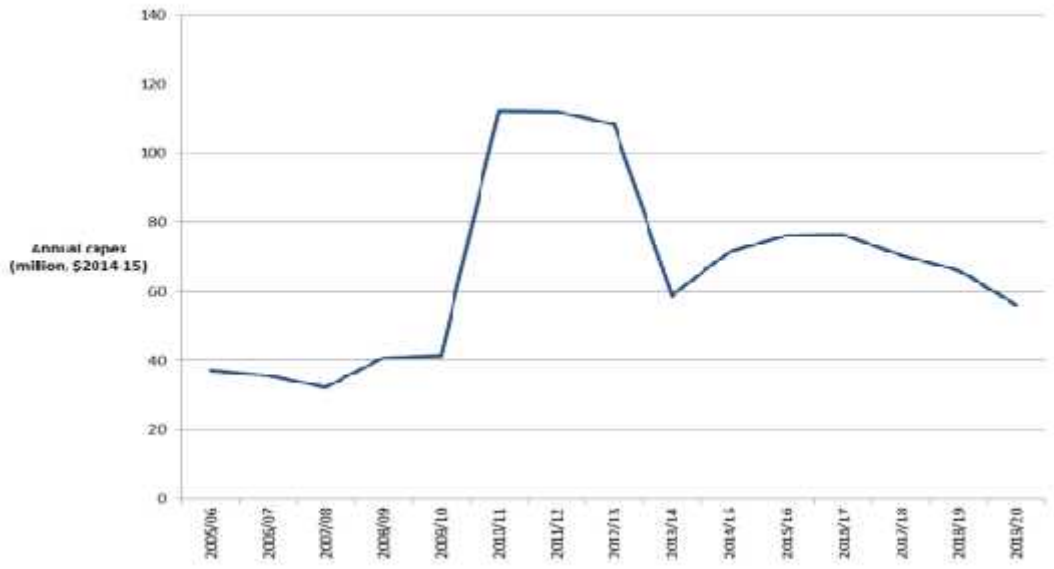
This high level assessment implies that the AER has been overly generous in the augmentation capex allowance.

2.1.1 Demand driven capex

The AER provides figure B-1 in its preliminary decision which shows the demand driven capex since 2005. What is telling about this chart is that between 2005 and 2010, when there was considerable increase in demand, the amount of demand driven capex was considerably lower (a little over half) than the allowance the AER provides in its preliminary decision. If a period with significant growth warrants less demand driven capex than a period with little growth, then there is something amiss with the AER allowance.

The ECCSA considers that even this level of augmentation/demand driven capex is inconsistent with a forecast demand well below the actual demands actually managed in the past.

Figure B-1 SA Power Networks' demand-driven capex historic actual and proposed for 2015–20 period ($2014–15, million, including overheads)



Source: SA Power Networks', *Regulatory Proposal 2015-20*, 31 October 2014, and historical regulatory reports

Whilst the MEU accepts that there may well be localised demand growth, this will be offset by falls in demand elsewhere in the SAPN network. The AER reports that its augex modelling indicates that overall most substations currently have a lower utilization factor than was forecast in 2009, with very few having a greater than 90% utilisation factor.

To address the expected localised growth, SAPN identified specific localities where growth was expected, imposing a need for augmentation

and three of these were reviewed by the AER - viz substations at Campbelltown, Clare and Aldinga.

Based on the major works planned for these three substations, the AER considers that the entire SAPN forecast of $186m for demand driven augmentation is appropriate. The ECCSA considers that this outcome is inconsistent with the view that there is no regional growth expected to exceed historic peak demand levels and considers that the AER has overstated the need for demand driven capex.

ECCSA also finds that the reasons given by the AER for accepting the SAPN view that some $52.7m is required to augment the network to accommodate quality of supply issues unconvincing. ECCSA accepts that the high incidence of residential rooftop PV can lead to higher voltages in the network but the arguments provided by the AER seem to support a view that the problem might well be overstated by SAPN. The AER, rightly, points out that higher voltages can be and are managed through a range of conventional approaches. The proposed amount of $52.7m is theoretically the capex needed to manage the problem reactively.

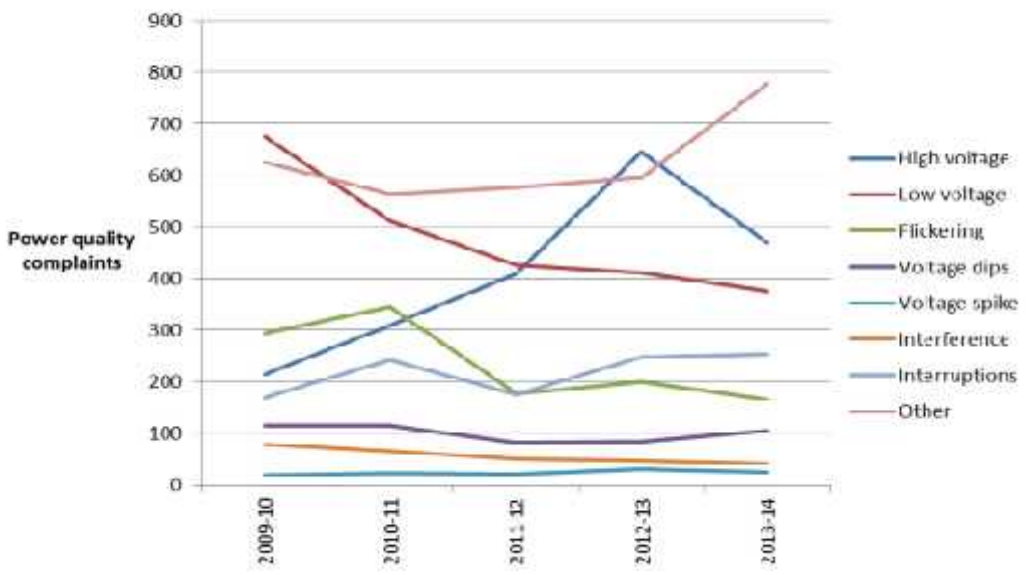
The amount claimed for this aspect of capex is nearly 20% of the total demand driven capex yet there is no clear explanation as to how this amount has been assessed, why it is so much and what is going to be done by SAPN with the funds.

The ECCSA is also concerned that the AER has allowed an unspecified amount of $72m for other projects covered by "demand driven capex". As the ECCSA has already identified that there should be minimal demand driven capex, it is concerned that the AER has increased the allowance by nearly 25% for unspecified projects but which are not detailed.

2.1.2 Quality of supply capex

The AER points out that quality of supply issues have increased (particularly high voltage events) and provides the following chart (B-4)

Figure B-4 SA Power Networks' power quality complaints 2009–10 and 2013–14



Source AER analysis, SA Power Networks' response to AER SAPN015

This chart purports to support an increase in augmentation capex to address quality of supply concerns.

ECCSA is concerned that the information is misleading as high voltage events include those arising from lightning strikes which tend to cause consumers to seek replacement of electrical assets burned out by the high voltage which lightning provides. This would lead to consumer complaints and is quite heavily related to the incidence of storms. SAPN comments that reliability in this period was impacted by an unusually high incidence of storms, supporting a view that the high voltage incidents are more likely to be from storms than from over-voltage caused by rooftop PV sources of supply.

ECCSA does not consider that consumers would be disadvantaged by a higher network voltage caused by PV feeding into the network where a voltage of 250-260 volts might occur. This is unlikely to cause consumers much need to complain. This assessment supports the AER decision not to provide capex of $19.6m for network monitoring.

However, the AER has agreed to SAPN proposed capex for $52.7m for continuing to manage power quality complaints on a "reactive" basis. The ECCSA has trouble understanding that this amount of capex is what is required for the task as there is no detail to support that this is consistent with past capex needs for managing quality of supply issues.

2.1.3 Reliability capex

The ECCSA supports the AER preliminary decision to only provide sufficient capex to maintain current reliability levels. Any improvement in reliability should be funded from STPIS rewards achieved by increasing reliability.

2.1.4 Strategic capex

The bulk of the strategic capex is for duplicating the undersea cable to Kangaroo Island (KI). The AER proposes to accept the capex for this project.

The ECCSA disagrees. By allowing capex for duplicating network assets ahead of their planned life completion, the AER is creating an unacceptable precedent which could provide an avenue for networks to claim capex for other similar projects where assets a duplicated ahead of need and cause unacceptable long term costs for consumers.

The AER points out that the cable to KI before the current cable was installed had a life well exceeding the design life of the cable although it did experience its first fault after 22 years of operation. The AER states that it undertook a simplistic assessment of likely failure of the existing cable and derived an NPV of the cost to consumers based on a 12 month replacement period. SAPN considered that 12 months was too short and replacement would take twice this long. Using a 2 year replacement period, the AER deduces that the cost of duplication is less than the NPV of the cost to consumers of a 2 year loss of supply - effectively the costs for using the diesel generators would be greater than the NPV of cable replacement.

However, a core assumption of both the AER (100% probability of failure at end of design life) and SAPN (50% probability of failure at end of design life) analyses is that the existing cable would incur catastrophic failure necessitating replacement of the cable. In practice, the previous cable was repaired and operated for many years beyond its design life. This means that the AER needs to carry out another NPV assessment assuming that the failures of the existing cable can be repaired rather than need replacement of the entire cable. The ECCSA is of the view that, based on the performance of the previous cable, catastrophic failure (as assumed by the AER and SAPN) is extremely unlikely and that any failure is more likely to be addressed by repair.

The AER has identified that the duplication project would be subject to a RIT-D assessment. The ECCSA considers that a RIT-D assessment must include an assessment of the probability that the cable can be repaired rather than facing catastrophic failure and so achieve its design life or

longer (as the previous cable achieved) along with the other alternatives that the AER lists in its preliminary decision.

With this in mind, the ECCSA recommends that the AER makes the cable replacement project a contingent project with a trigger set on the outcome of an appropriate RIT-D assessment. Including the allowance prior to the RIT-D process provides SAPN with the opportunity to reap an unearned reward from the CESS incentive should the RIT-D result in a decision not to proceed with the project.

The ECCSA agrees with the AER regarding the provision of network monitoring and additional SCADA and ADMS for network control. Specifically, the ECCSA considers that SAPN has to demonstrate that there is a net benefit to consumers from the proposals and that the benefits from the other cost elements (ie a reduction in opex and improvement in reliability based on the latest AEMO estimates of VCR which reflect a bonus from the STPIS) are included in the assessment. The AER highlights the ECCSA concern that it is inappropriate for consumers to fund works which deliver a benefit to SAPN under the incentive schemes.

2.1.5 Environmental

ECCSA notes that the AER has accepted the proposed remediation at the Mannum Town substation necessitated by leaking transformers. The ECCSA does not see why consumers should have to pay for remediation that has been caused by poor maintenance practices of SAPN (and its antecedents).

SAPN will have earned a bonus under the opex incentives used by AER and the state regulator ESCoSA because it did not apply the correct maintenance practices to ensuring the oil leaks did not cause environmental problems. By underspending on opex, SAPN would have achieved a bonus under the opex incentive schemes applying to it.

To provide SAPN with capital to address an issue of its own making (and causing consumers to pay for this for many years into the future) is not in long term interests of consumers.

The ECCSA considers that the AER has erred in allowing this capex.

2.1.6 Safety

The ECCSA notes that the AER preliminary decision does not accept the SAPN proposals for bushfire mitigation capex or road safety capex.

Despite the decision not to accept the bushfire mitigation and road safety capex, the AER still accepts safety capex of some $21m proposed for "other safety" capex which is a 25% increase on what SAPN expended on safety capex in the current period. The ECCSA notes that there is no explanation as to why the increase in "other safety" capex has been accepted.

The ECCSA agrees with the AER that the bushfire capex and road safety capex should not be agreed to, and accepts the reasons the AER provides for its decision.

The ECCSA considers that the arguments provided by SAPN for the inclusion of these costs do not comply with a step change requirement (eg such as a government decision[5]) but rest entirely on views from SAPN consumer engagement. ECCSA provided its views on the SAPN consumer engagement in its response to the SAPN proposal and this explained why ECCSA did not support SAPN with its claims of consumer support for these two elements of the safety capex program,

What is key to the SAPN proposal is its assessment of consumers "willingness to pay" (WTP) for these projects. The ECCSA considers that, along with the AER, the SAPN WTP assessment is not representative of all consumers and the extrapolation of the consumer engagement does not reflect the views of those who have no ability to pay more.

The ECCSA is aware of the methodologies used by researchers in their consumer engagement processes and is very concerned that the researchers not only have limited ability and time to explain the full implications of the proposals put into focus groups, regional meetings of consumers and on line surveys, but can and do cast their questions in such a way[6] that biases the outcome in directions sought by the seeker of the consumer views. In a complex technical and economic environment, in order to get accurate feedback requires much more time and information than the consumer engagement undertaken by SAPN and other networks.

In particular, observations of consumer engagement processes shows that little or no effort is provided in explaining that an increase in capital expenditure will require consumers to pay the same increase for the next 40-50 years as the capital value of the assets is paid off. For example, observations show that comparisons are made in relation to the cost of a

[5] The ECCSA notes that the Victorian government imposed requirements on the Victorian distribution networks as a result f the Victorian Bushfire Royal Commission. There has been no equivalent impost made on SAPN

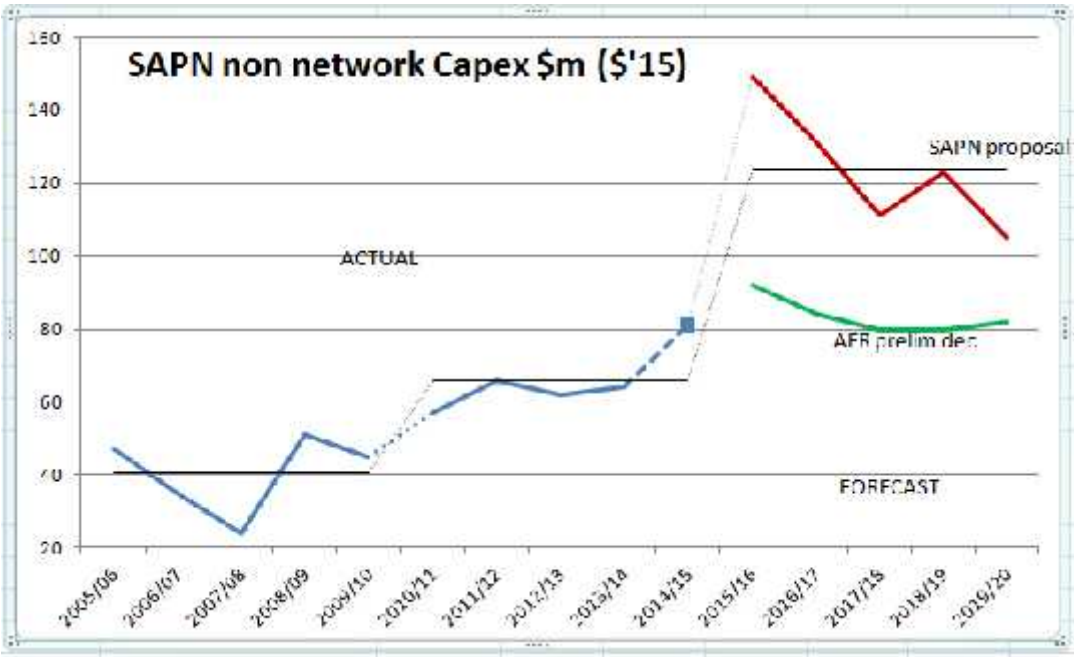
[6] For example, did the questioners point out that SAPN tariffs had risen by over 50% in the last 5 years, or that the only reason SAPN could include these projects without increasing tariffs was due to the current very low cost of capital environment and that when the cost of capital returns to long term averages, there will be a significant cost outcome

cup of coffee as reflecting the increase in costs for consumers yet no mention is made that this same cost of a cup of coffee will have to be paid for tens of years hence. This then raises the concern that decisions are being made by current consumers which will impact costs that future consumers will have to pay.

The ECCSA notes the view of the AER Consumer Challenge Panel (CCP) that the Power Line Environmental Committee (PLEC) is well placed to provide a view on whether there is a need for undergrounding of powerlines for bushfire and road safety. The ECCSA is not so sure. The make up of the PLEC includes many who will not be exposed to the cost of the work if it is undertaken and then allocated to consumers through their network charges. It is very convenient, for example, for councils to agree to road safety changes being paid for by electricity consumers so that councils can avoid the costs. A separate view is that councils should carry out these costs on behalf of their rate payers who are the beneficiaries of the improved road safety. A similar argument can be levelled at the Department responsible for roads that they should pay for issues relating to safety and this view is supported by the SA Minister for Energy in his response to the SAPN proposal.

2.1.7 Non network capex

The following chart shows the SAPN non network capex proposal in context along with the outcome of the AER assessment of the SAPN proposal. This shows that the AER preliminary decision provides a significant increase in non-network capex compared to the current period. Effectively the AER has accepted that non-network capex for the new period will be twice that considered to be appropriate by ESCoSA in 2005.



Source: SAPN application, SAPN economic benchmarking data templates, AER prelim decision

The ECCSA considers that the AER assessment of the non-network proposal has been quite conservative in allowing any increase above that actually used by SAPN in the current period, especially as SAPN under-ran the total capex allowance in the current period. The ECCSA considers that if more non-network capex is needed, then SAPN could have implemented a number of the non-network capex projects during the current period using the capex that was allowed by the AER but unused by SAPN. On this basis, the ECCSA considers the AER has not been sufficiently rigorous in assessing the allowance for the new period.

The ECCSA is concerned that the justification for the SAPN claims for non-network capex were not supported with appropriate rationale and documentation, particularly for the building and property capex. The ECCSA raises the question whether such shortcomings are typical of all other capex and that SAPN internal management has not carried out its task as might be expected of a prudent network service provider.

2.2 Replacement capex (repex)

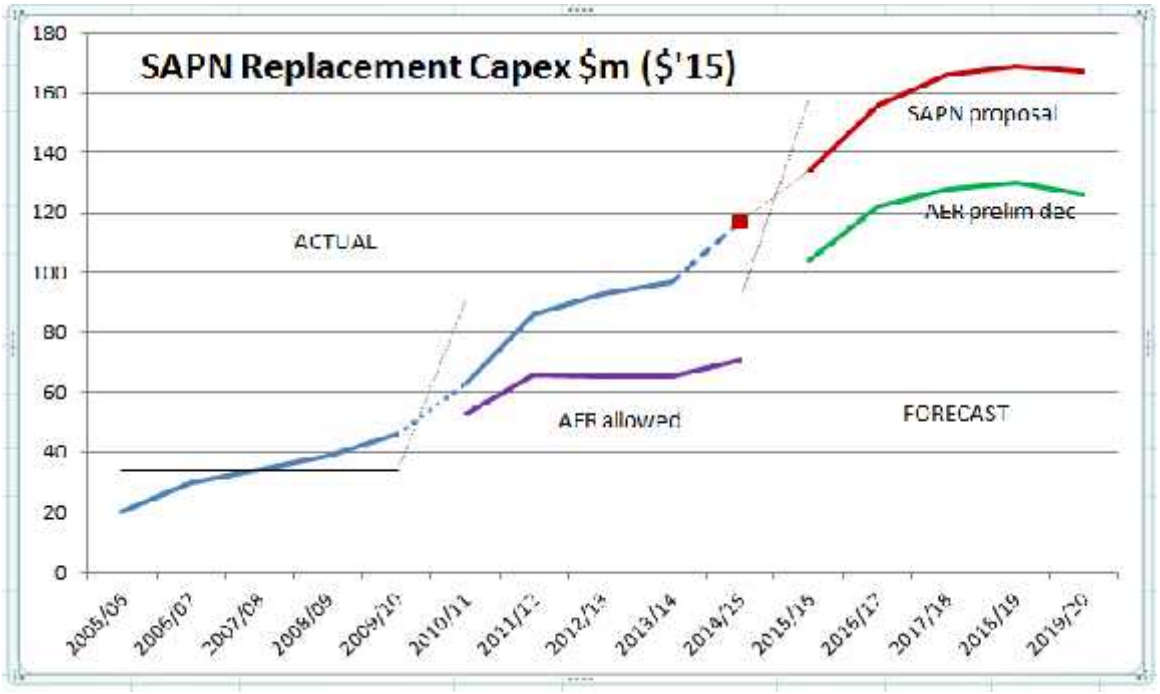
In its response to the SAPN application, the ECCSA considered that the SAPN had overstated its need for repex. The AER assessment confirms this view, but does accept that there is a need for more repex in the next period than was used in the current period. To support the AER view of repex, the AER has undertaken a number of different top down assessment approaches which, with some exceptions, support a lower level of capex but still greater than used by SAPN in the current period.

What is absent from the AER approach is how it has used the outcomes from the different modelling to derive its final allowance for repex although it appears to use the value of $487m derived from the "calibrated lives" assessment of repex. However, it would appear that the AER has used this value rather than the value of $396m which would appear to be at the efficient frontier being the "Benchmarked calibrated best". This would indicate that the AER accepts that SAPN should be allowed a significant discount from the efficient frontier. The ECCSA does not consider that such a large difference should be provided as the import of the benchmarking approach to allowances is to ensure that all networks get close to the efficient frontier.

The ECCSA accepts that the detailed assessment by the AER is more robust than the high level approached carried out by ECCSA in its response to the SAPN proposal. Having said this, the ECCSA is concerned that SAPN's own approach to repex as exhibited during the current period is at odds with the AER assessment.

Both the AER and SAPN consider that more repex is needed for the next period and SAPN did overspend its repex allowance during the current period, but overall, SAPN under spent the AER allowance for total capex in the current period and thereby accrued a significant and substantial benefit by under running the allowance. Thus, at a high level, SAPN had the means and the opportunity to address the concerns that it now professes to have (and which to some extent the AER agrees). So if more repex is needed to address the concerns that SAPN states that it has about the condition of its network, why did it not address these more fully when it had the funding in the current period rather than take an enhanced profit by not using the capex that it had been allowed.

The ECCSA has updated the chart it provided in its response to the SAPN proposal showing the historic usage of repex and the SAPN forecast for the next period. The update adds the AER preliminary decision on repex on the same basis.



Source: SAPN application, SAPN economic benchmarking data templates, AER prelim decision

What is concerning is that the increase in repex allowed by the AER above the average use of repex in the current period, is of the same order of magnitude as the under-run by SAPN of total capex in the current period. This means, effectively, SAPN has deferred needed repex from the current period and moved it to the new period and thereby creating a bonus for itself through under-running the current period repex, with this being achieved whilst maintaining reliability.

The ECCSA considers that this "gaming" by SAPN is not in the long term interests of consumers and should have been taken into account by the AER in its assessment of repex.

2.3 Escalation of costs

In sections 6.2 (wages) and, 6.3 (materials and land) below, the ECCSA has provided its views on escalation of the costs of the capex allowance.

2.4 Capex overall

SAPN made a claim for a large increase of nearly 60% in its capex for the next period above that actually used in the current period. The AER effectively considers that the SAPN proposal is significantly overstated and revised down the allowed capex. Even so, the amount of capex approved in the preliminary decision still provides an increase above the capex actually used in the current

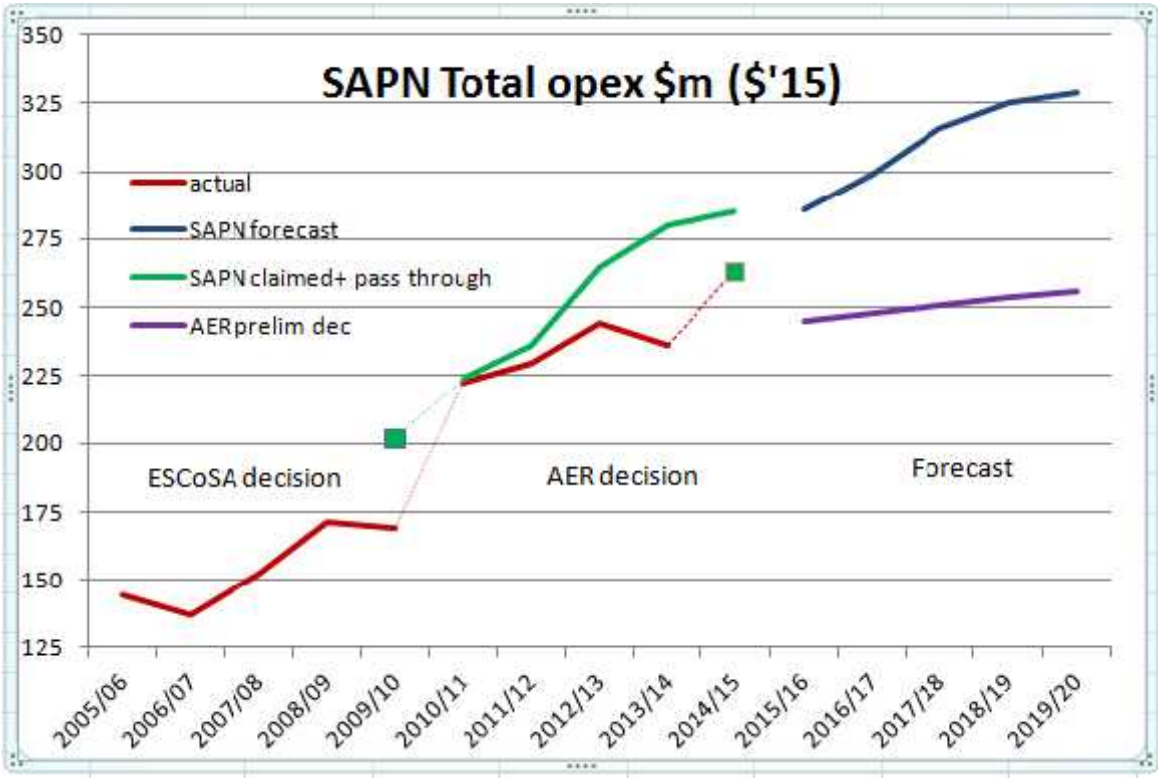
period by some 5%. When it is considered that in the early years of the current period there was some expectation of growth (which quickly dissipated) the increase in allowed capex for the next period seems overstated.

The ECCSA accepts that the AER approach has examined each element in detail but there is still an over-arching view that the AER has not been as rigorous in its assessments as it might have been.

In particular, the ECCSA considers that the duplication of the undersea cable to KI should not be included in the base capex and should be included as a contingent project. Removal of this project would result in the capex allowance for the next period being much the same as the actual capex used in the current period. The ECCSA considers that this would be a more appropriate outcome.

3. Forecast Operating Expenditure

The outcome of the SAPN proposal and the AER preliminary decision is clearly shown in the following chart which compares the two opex forecasts (AER and SAPN) to the actual opex in the previous and current periods, along with the initial (2009) opex claim made by SAPN (then ETSA Utilities) for the current period. The step up for years 2012/13, 2013/14 and 2014/15) in the SAPN claimed allowance includes both the adjusted costs in the initial proposal and the additional costs claimed by SAPN for addition vegetation management - a pass through of costs that the AER approved in July 2013.



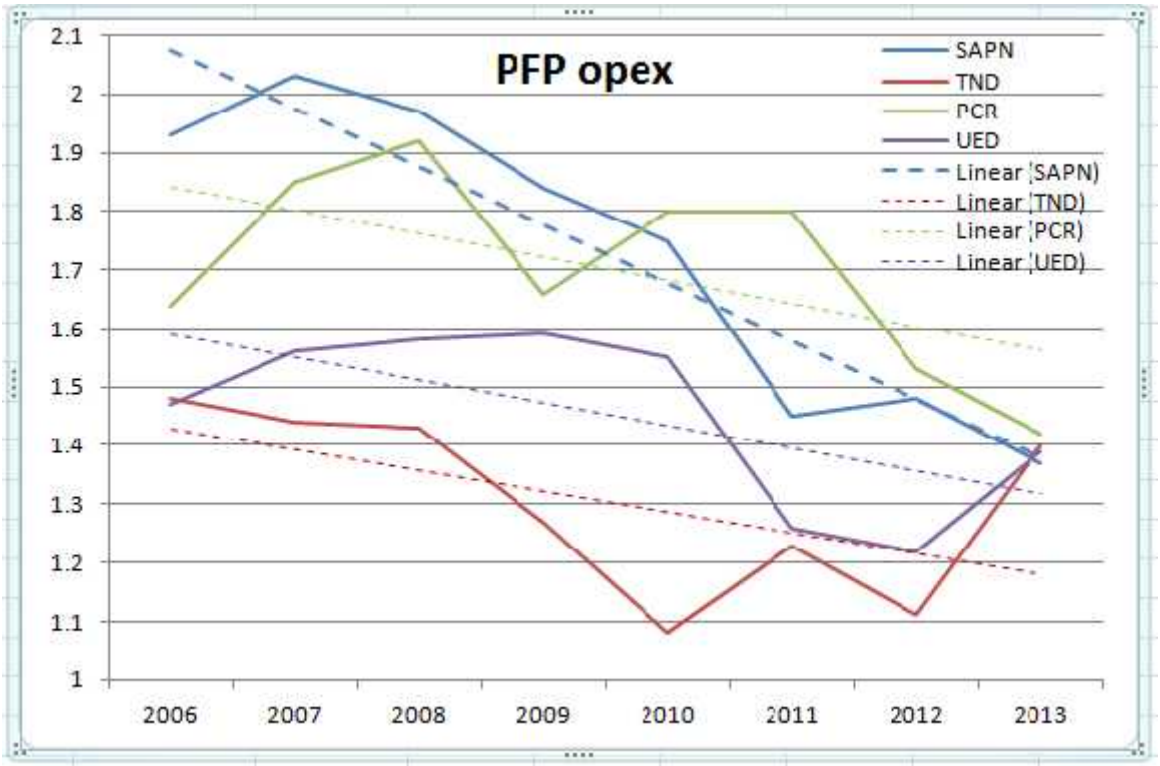
Source: SAPN application, SAPN economic benchmarking data templates, SAPN application for pass through, SAPN benchmarking RIN 2013/14, AER prelim dec

The chart could be seen to indicate that the opex proposed by SAPN for the next period reflects the general trend of opex increases over the past decade, but a little overstated by perhaps 5-10%. In contrast the AER forecast reflects an opex which maintains a similar cost to the most recent actual opex. This view is replicated in the AER figure 7.4 in attachment 7 which shows an overall total opex increase over the five years to reflect the revealed opex.

The question then becomes whether the 2013/14 actual opex is efficient and therefore can be used as a starting point for the next period opex allowance, and whether the forecast opex can be seen to be efficient overall.[7].

3.1 Efficient opex and benchmarking

The following chart maps opex partial factor productivity (PFP) for SAPN performance over time along with the PFP performance of three other networks (Powercor, United Energy and TasNetworks distribution[8]) which have a similar mix of rural, urban and business districts.



Source: AER Electricity distribution network service providers, Annual benchmarking report November 2014, ECCSA calculations

What is concerning is that SAPN performance over the eight years is the rates of change shown by the trend lines. SAPN performance has deteriorated at more than twice the rate of reducing performance of the other three networks, all of which have almost identical rates of deteriorating performance[9]. The rate of change for the three networks is in the range of -0.036 to -0.040 per year

[7] The ECCSA considers that the AER needs not only to assess whether the base year opex is efficient but whether the *forecast opex* is also efficient.
[8] It is important to note that TasNetworks has already realised that its loss of productivity over time is concerning and has taken active steps to remedy this
[9] The three networks were also selected as they were in the higher range of productivity outcomes and so excluded Ergon and the NSW distribution networks which all exhibit very poor performance

reduction in opex PFP compared to the SAPN reduction of -0.1 per year. This implies that the base year performance (ie in 2013/14) for SAPN might not be efficient as indicated by the measure used by the AER which reflects average performance over the eight years.

It is recognised that there have been a number of external factors that might have caused all networks to lose productivity over the eight years, but the consistency of the reductions in performance seen for the other three networks, might indicate that these external factors only address half of the SAPN performance reduction.

In its assessment of base year performance the AER notes (page 7-21 of attachment 7):

> "Over the benchmarking period we have observed that SA Power Networks' operating expenditures have increased significantly, however we observed a decrease in opex productivity across almost all other service providers."

The ECCSA agrees with this observation but highlights that the AER has not addressed the fact that SAPN performance has reduced much faster than that of the other networks, implying that SAPN has not only those factors seen commonly across all networks, but other (but unidentified) reasons for declining productivity..

This same faster loss of productivity by SAPN can also be seen in the state-wide multilateral total productivity measure and in the ranking of SAPN in the opex PFP where SAPN was #1 performer in 2006 and has fallen to #4 performer by 2013.

Based on the benchmarking data, it would seem that the SAPN base year opex is not efficient compared to either SAPN's own performance or when compared to others in that SAPN ranking has fallen significantly and its rate of loss of productivity is much higher than other similar networks.

It is of extreme concern that the AER has concluded that the SAPN performance over time supports a view that the revealed cost in 2013/14 is efficient. By making this assumption, the AER has provided a considerable degree of conservatism into its preliminary decision on SAPN opex.

The AER decision to assume the base year opex is efficient needs to be assessed with its decision that there is to be no productivity improvement included in the labour cost and other rate of change adjustments. The ECCSA considers that the AER not only has included conservatism in its decision to assume the base year is efficient but when coupled to the decision not to require any productivity adjustment factor into future opex, has compounded this conservatism.

The ECCSA is of the view that if the base year is deemed to be efficient (even though it reflects declining productivity) then the AER needs to provide a driver to reverse the falling efficiency by imposing a productivity increase within the rates of change development. The ECCSA considers that this productivity improvement should be reflective of the difference between the actual rate of productivity loss by SAPN and the rate of productivity loss experienced by the other networks.

3.2 Adjustment of the base year opex

The AER has assessed the adjustments to the base year opex and the ECCSA agrees with the AER approach.

However, the ECCSA also notes that during the current period, the AER allowed a pass through of costs related to increased vegetation management caused by greater than average rainfall in SA during the current period. The ECCSA was concerned that the AER had allowed the increased cost pass through as it considers that there are "swings and roundabouts" when assessing changing weather patterns. What is concerning to the ECCSA is that the base year opex includes for vegetation clearance reflecting a wetter than average rainfall pattern. Current forecasts are that the next few years might exhibit an "el Nino" weather pattern which would result in much less vegetation clearance being required, providing SAPN with a vegetation management allowance based on wet weather to apply to drier weather.

Although the AER approved a positive pass through for the increased vegetation management, the ECCSA is quite sanguine that SAPN will not seek a negative pass through because of lower than average rainfall causes a lower cost of vegetation clearance, but will take the saving to enhance its EBSS reward.

The ECCSA notes that the SA Government has a similar view to that of ECCSA regarding vegetation clearance. In its response to this view, the AER comments that the opex allowance is seen in total terms rather than discrete allowances (see pages 7-101and 7-102). The ECCSA agrees with this but points out that in the current period, the AER approved a considerable increase in the opex allowance to accommodate the result of a specific weather change pattern which had caused increased vegetation management costs. If the AER had applied the reasoning included in this preliminary decision not to make an adjustment as suggested by the SA government (ie the AER view that opex is seen in its totality in a single rather than for the specific cost elements) it would not have allowed the pass through for increased vegetation management on the basis that SAPN could have adjusted its opex program to accommodate the increased demand on vegetation clearance by generating savings elsewhere. There is an inconsistency being applied by the AER in this issue.

To address this anomaly, the ECCSA considers that, rather than reducing the opex allowance to reflect a return to normal weather patterns as proposed by the SA government, the AER should remove from the base year the costs allowed in the pass through for the increased vegetation clearance that are embedded in the base year opex.

3.3 Step changes

In its preliminary decision, the AER provided some very useful guidance when assessing the step changes proposed by SAPN. These are (pages 7-73 t0 7-76 of attachment 7):

1. "Base opex already reflects the cost of meeting existing regulatory obligations, and maintaining the reliability, safety and quality of supply of standard control services."
2. "Several proposed step changes are for initiatives designed to achieve efficiencies. An increase in funding for such initiatives would be inconsistent with the incentive based regulatory framework"
3. "We could find little evidence of changes in SA Power Networks' regulations or requirements"
4. "There was no compelling evidence to support increases in forecast opex for SA Power Networks' customer driven initiatives or changes in community expectations"

The ECCSA considers that the AER has encapsulated well ECCSA concerns about step changes in these four statements.

SAPN identified four main categories of step changes - legal and regulatory, capital program impacts, customer driven initiatives and financing related. In its response to the SAPN proposal, the ECCSA provided significant analysis of the proposed step changes and concluded that the large majority of the step changes identified were not warranted; the ECCSA assessments are effectively summarized in the four points noted above from the AER preliminary decision.

The AER assessment of the proposals is, like that of the ECCSA, that most of the SAPN proposals are already:

> "…compensated through other elements of [the AER] opex forecast, such as the base efficient opex or the 'rate of change' component. Step changes should not double count costs included in other elements of the opex forecast." (page 7-71)

The ECCSA considers that the AER assessment of the step changes proposed by SAPN is based on both meticulous analysis and a recognition that it is

required only to allow for costs that are required to deliver the network services in the most efficient manner.

We agree with the AER decision for the need for 2 additional staff to manage the changes resulting from full implementation of NECF.

However, we disagree with the AER on its decision to include the mobile radio costs as a step change. The AER has provided its reasons for supporting this step change in a confidential attachment so it is impossible for ECCSA to comment on the detail of why the AER has accepted this as a step change. The ECCSA maintains that, as it is not driven by external requirements, the proposed step change is really a decision by SAPN to migrate from its current approach. Therefore, unless such a migration results in a lower overall cost, the ECCSA cannot see that such a decision is prudent.

3.4 Corporate overheads

In its proposal, SAPN implied that it had significantly increased its overheads and in its response to the proposal, ECCSA highlighted this point and added that corporate costs should reflect more constancy over time rather than exhibiting a step increases at each reset.

The ECCSA accepts that the AER approach to setting an opex allowance implicitly assumes that the current level of overheads are efficient as the base year costs are assumed to be efficient. On this basis, corporate overheads are effectively adjusted in line with the growth and inflation adjustments.

ECCSA members advise that corporate overheads do not increase linearly with growth but are impacted by inflation. By increasing all opex by the growth factor, the ECCSA notes that the AER has implicitly increased overheads at the same rate. As overheads are such a large proportion of SAPN overall costs (exceeding some 25% of all opex), the ECCSA considers that the AER should have discounted the impact of growth from all opex to exclude such a large increase for overheads.

3.5 Alternative control and negotiated services

The ECCSA raised some concerns about the transfer of some metering services from SCS to ACS in its response to the SAPN proposal. The ECCSA is pleased to note that its concerns have been taken up by the AER in its preliminary decision.

The ECCSA is aware that there are a significant number of services for which SAPN is the only source and many of these are included in negotiated services.

SAPN provides annually an indicative price schedule covering many of these negotiated services.

The ECCSA sees that this schedule would provide the basis for subsequent negotiation. What concerns the ECCSA is that there may not be an acceptable logic for the development of these negotiated service prices, other than they are prices escalated from many years ago. The ECCSA is aware that this process for escalating prices from the past might be no longer be appropriate and the prices might not reflect current costs for carrying out the work.

The ECCSA considers that SAPN should be required to provide the AER with current costing build up for each price in the schedule considering its importance when customers have to "negotiate" with SAPN[10].

3.6 Escalation of costs and productivity

SAPN sought to increase its opex allowances for forecast changes in the cost of labour, materials, land and growth. The AER has assessed different but lower rates of change for cost escalation and growth.

In sections 6.2 (wages), 6.3 (materials and land), and 6.4 (growth), the ECCSA has provided its views on escalation of the costs of the opex allowance.

The AER considers that there is no need to provide for a specific adjustment to reflect expected productivity as this is embedded in the growth adjustment. The ECCSA disagrees.

While the expected increase in growth has been discounted to some extent (and therefore the opex for the expanded network would be less than a pro-rated increase in opex) this apparent productivity growth only applies to the element of the expanded network.

The ECCSA is concerned that the bulk of the opex is committed to the existing network and this is where the increase in productivity is required, particularly as the benchmarking data shows that SAPN productivity has fallen considerably over the past eight years. As the ECCSA comments in section 6.2 below

> "[ECCSA] members have to continually improve on their productivity merely to "stay still" in regard to market share - those with lower productivity lose market share and therefore have lower profitability."

The AER assumption that the growth adjustment imposes an efficiency improvement on SAPN opex is incorrect and, in effect, the AER decision has accepted that SAPN is at the efficient frontier, which is clearly is not.

[10] The ECCSA comments that negotiating with a monopoly provider is an oxymoron

The ECCSA considers that the AER preliminary decision does not impose on SAPN the pressures that competition would impose on SAPN.

3.7 Opex overall

In its response to the SAPN proposal, the ECCSA concluded that there was little valid reason for SAPN to increase the opex above current levels and reason to have a view that the current opex is overstated and not efficient.

The ECCSA is pleased that the first part of its concerns has been addressed well by the AER in its preliminary decision. The outcome of the AER deliberations is that the AER considers the current level of SAPN opex is sufficient for the next period - that no increase is needed. The reasons for the AER not increasing the opex are cogent and reasonable, and are supported by the ECCSA.

The ECCSA is less convinced than the AER that the current SAPN is efficient, should be used for setting the opex for the next period and that there is no need for a productivity adjustment.

4. Incentive schemes and service performance targets

4.1 Overview

Under the new incentive scheme regime, SAPN will be exposed to incentives on usage of capital (a new capital expenditure sharing scheme - CESS), on usage of opex (the continuing efficiency benefit sharing scheme - EBSS), on reliability (the continuing service target performance incentive scheme - STPIS) and the demand management incentive scheme (DMIS).

The ECCSA notes that the three main incentive schemes (STPIS, CESS and EBSS) are complementary and, to maintain integrity of the schemes and their inter-relationships, it is essential that any changes made must ensure that the balance between them is not impacted. The ECCSA notes that the AER in its preliminary decision has followed this over-arching requirement.

4.1 CESS

SAPN has accepted for the CESS is to be applied as defined in the AER guideline, and the AER preliminary decision confirms this.

The ECCSA supports this.

4.2 EBSS

The ECCSA notes that the AER approach to setting the EBSS addresses the ECCSA concerns that it detailed in its response to the SAPN proposal.

4.3 STPIS

The ECCSA notes that the AER approach to setting the STPIS addresses the ECCSA concerns that it detailed in its response to the SAPN proposal.

The ECCSA also notes that it considers that the STPIS targets should be set on a moving average of the most recent 4-5 year performance rather than on static numbers set at the start of a regulatory period. This would modify the STPIS targets to include the outcomes of the opex and capex used each year.

4.4 DMIS

The AER has allowed a DMIA of $0.6m pa.

In principle, the ECCSA does not disagree with the DMIS being extended but it is concerned that there is a lack of control on what allowances are provided and what is garnered from the DMIS across the NEM.

In this regard the ECCSA notes that all networks have been granted funds under the DMIS yet there is no apparent coordination between the networks to ensure that the funds provided for demand management projects are not duplicated or that information generated from consumer funding is shared between networks.

A major concern is that the projects undertaken by the networks are not focused on generating the most reward for the funding provided and projects are subject to the desires of the networks' internal management rather than on the long term interests of consumers.

The ECCSA considers that the AER has to apply much greater control on what projects are funded from the DMIS funds to ensure maximum benefit for consumers, that there is no duplication of DMIS activities and that the information generated by each DMIA project is shared with all other networks and with consumers.

5. Cost of capital and allowed revenue

In its preliminary decision on SAPN, the AER has applied its WACC guideline as developed during the Better Regulation program. This results in a considerably lower value for WACC than was seen from the SAPN proposal.

The ECCSA considers that SAPN, by rejecting the key elements of the AER guideline, is pursuing an agenda (along with the other distribution networks) to unnecessarily maximise their revenue streams to the detriment of consumers.

The arguments about WACC provided by SAPN (and other networks) all revolve around them gaining more revenue, yet this is not what the National Electricity Objective (NEO) or of the Rate of Return Objective require.

- The NEO is about the long term interests of consumers. Whilst SAPN argued that the AER is incorrect in its guideline, it has not demonstrated that the AER guideline is not in the long term interests of consumers and that the SAPN approach is in the interests of consumers. At a high level, the AER guideline bears much commonality to the development of the WACC seen over the past 15 years, and this approach has resulted in adequate (some would say excessive) investment in networks. It is therefore incumbent SAPN to provide evidence as to where the AER guideline would result in less investment than is needed in networks

- The rate of return objective requires the AER to grant an allowance that recovers at least the efficient costs for the capital needed by the benchmark network. Again, history shows that the allowances provided in past determinations have delivered this outcome. SAPN needed to provide evidence that the AER guideline is so different from previous decisions that efficient costs will not be recovered. What SAPN has provided is that its approach would give them higher returns, not that these returns are efficient.

The ECCSA is of the view that the AER guideline is not so different from the regulatory approaches used in the past or that the guideline is demonstrably deficient; in fact the ECCSA considers the AER guideline removes risks to SAPN rather than adds them. SAPN focus is on attempting to prove that its preferred approach meets the requirements of the Rules more so than the AER approach and, by doing so, has concentrated on showing it is entitled to a higher return than that it would get from the AER guideline. What was totally absent from the SAPN arguments, is any evidence that the AER draft decision does not deliver an outcome which is efficient, meets the NEO and the rate of return objective. The ECCSA considers that the empirical evidence from history

supports the AER guideline as being more efficient[11] than the approach strongly put by SAPN.

5.1 The AER preliminary decision

The AER has devoted considerable effort into identifying an appropriate process to develop a weighted cost of capital (WACC) that meets the requirements of the Rules and the intent of the Law. The bulk of the work was undertaken during the Better Regulation program which balanced the views of both the networks and of consumers whilst ensuring the requirements of the Rules were implemented. As the ECCSA commented in its response to the SAPN proposal,

> "…the ECCSA supports using the [AER rate of return] guideline in its entirety rather than "cherry picking" aspects which favour one stakeholder over another."

Except for the AER draft decision on the value of "gamma", the AER has maintained the integrity of its guideline by applying it in full to this draft decision. The AER goes to considerable lengths to demonstrate that its guideline and the current assessments of point estimates remain as valid now as they did in the build-up of the guideline where all stakeholders had considerable opportunity to provide their disparate views and where the AER devoted considerable effort to balance these as it settled on a suite of outcomes the constitutes the guideline as published.

Despite the ECCSA accepting that as the rate of return guideline must be seen in its entirety and not being "cherry picked" for elements which favour one stakeholder over another, the ECCSA does highlight that there are elements of the guideline which are biased in favour of the network.

In particular, in reviewing the detailed explanations by the AER for its draft decision, the ECCSA notes that there are aspects where the AER has taken a conservative view on the parameters used to determine the final "point estimates" that are inherent in the guideline.

5.1.1 Gearing and credit rating.

> The AER determined that the benchmark entity would be geared at 60% debt with a credit rating of BBB+.
>
> As the level of gearing is also closely related to the benchmark credit rating, the ECCSA considers that both parameters should be set in

[11] An efficient outcome would be where there is just enough investment to deliver the services at the required performance and no more.

relation to the other. Analysis of the actual gearing of energy networks and the credit ratings achieved indicates that the AER has taken a conservative view in relation to both. Table 3-33 in the draft decision attachment 3 shows that the average gearing of the networks examined was between 63% and 66% after excluding the impact of AGL, Alinta and GasNet in the assessments[12].

In table 3-3 (section H) in the same attachment, the AER provides a listing of network service providers (each with their credit ratings) and from this concludes that the typical credit rating would be BBB+ for the cohort of firms included and from this the AER concludes that the benchmark credit rating would be BBB+.

What is absent from the analysis is any correlation assessment of the gearing and credit rating. For example, Australian Gas Networks (formerly Envestra) is shown to have a credit rating ranging from BBB- to BBB+ yet the reasons for this variation can be seen when its gearing is assessed. In fact, Envestra had a gearing in excess of 80% and still had a credit rating of BBB+, yet Envestra contributes to the setting of the benchmark.

The table also does not differentiate between regulated and unregulated networks. For example, the networks closer to pure play networks (eg ETSA, CitiPower, Powercor, AusNet) all have credit ratings higher than BBB+ and APA which has about half of its assets unregulated has a credit rating of BBB.

The purpose of this analysis is not to argue that the AER should have increased the gearing and/or the credit rating of the benchmark entity, but to highlight that the AER has been significantly conservative in its setting of the benchmark parameters - this conservatism provides the networks with an outcome which increases their revenues for no real value to consumers.

5.1.2 Corporate bond rates.

In previous submissions to the AER, the ECCSA and its affiliate Major Energy Users (MEU) has observed that the corporate bond rates for entities with the same credit rating vary significantly and that energy networks appear to have lower bond rates than other firms with the same credit rating. In its preliminary decision, the AER acknowledges this (see

[12] The ECCSA considers that these firms should be excluded as they had (other than GasNet) considerable non-regulated activities included in their portfolios which would have depressed considerably their ability to be classed as "pure play energy networks". In particular, the large portfolio of energy retailing in their portfolios (other than GasNet) would have required considerably lower gearing levels in order to maintain a credit rating of BBB+.

section H1.4 of attachment 3) but because the AER prefers to use third party sources of data it is constrained from adjusting the data to reflect this very apparent anomaly.

For the reasons given by the AER, the ECCSA does not propose that the bond rates used by the AER for use in setting the cost of debt should be discounted

The ECCSA affiliate MEU has previously provided its view to the AER that using corporate bonds is a higher cost source of debt than is available from other sources - this observation has also been made by the ACCC's Regulatory Development Branch in its 2013 paper "Estimating the Cost of Debt". The AER acknowledges this in section H1.4 and notes that bank debt is a significant proportion (>25%) of the debt build up of the total debt held.

Both of these observations highlight that using estimates of the cost of corporate bonds to be the basis of the efficient cost of debt overstate the real cost of debt that networks will incur. This decision by the AER again highlights that the approach used adds another level of conservatism (which the AER acknowledges) into the setting of the WACC and provides networks with another unearned benefit.

5.1.3 Gamma

The ECCSA accepts that it is difficult to argue the individual details for each element comprising the value for gamma as there is no consistency in the data that is available.

The ECCSA considers that the preliminary decision on gamma (reducing it from 0.5 to 0.4) reflects a move towards more conservatism in assessing the available information. For example, the AER notes that the distribution rate can be assessed as low as 0.7 or higher to 0.8 depending on the source of data (see tables 4.1 and 4.2 in attachment 4). The AER considers the lower bound for the distribution rate should be used in the calculation of gamma although it also points out that with that source of data, the utilisation rate might be higher. This approach results in a more conservative outcome than might otherwise apply.

What also concerns the ECCSA is that there is a lack of consistency in the approach for setting gamma compared to the basis for setting WACC. For example, the WACC is theoretically based on a pure play regulated energy network business operating in Australia.

However, influences on the calculation of gamma cover a much wider

scope of data than this limited group of companies[13]. For example, the distribution rate is based on assessments made from data covering the entire cohort of tax payers subject to imputation. There is a basic assumption made that pure play regulated energy network businesses provide dividend imputation to their shareholders in proportion to the entire cohort of the market. This is a bold assumption. It is widely recognised that certain types of businesses provide less franking of their dividends than others - those with secure cash flows (such as energy networks) are more likely to fully frank their dividends than others. This means that imposing an assumption that the benchmark entity would frank its dividends to the market average is unlikely and therefore a conservative assumption.

Further, offshore investors in the market wide cohort have made a conscious decision to acquire assets to generate income in Australia with the full knowledge that they will not be able to benefit from imputation and this biases the data for the derivation of the utilisation rate. On this basis, it is inappropriate to reward offshore investors in energy networks by providing some return as a revenue when they have made a conscious decision to invest even though they gain no benefit from imputation.

It would appear that the AER has based its assessments on lower utilisation and distribution rates than would otherwise be the case for a pure play energy network which is the benchmark entity for setting the WACC.

The ECCSA questions whether the AER is addressing the correct question with regard to imputation. The ECCSA accepts that the data reflects the utilisation of tax credits for the entire cohort of tax payers including offshore owners yet should the revenue adjustment made for regulated assets be based on data for all of the cohort or should it just be based on how a benchmark entity would operate?

The ECCSA considers that the AER has moved to a conservative position on the issue of gamma to the detriment of consumers[14].

5.1.4 Benchmarking

The fact that SAPN has claimed a higher WACC than that resulting from

[13] The ECCSA notes the AER approach that the utilisation factor is market wide and the distribution is firm specific (see section 4.4)

[14] The ECCSA points to the absurd situation seen recently in Victoria where the government provided networks with cash to implement enhancements to the networks to limit bushfire risks. Because the AER had granted a gamma less than unity, consumers were obliged to pay a premium to the networks to reimburse them for the potential tax liability they might incur because the government grant is seen as revenue.

the application of the AER guideline reveals a failure by the AER to carry out benchmarking of historic outturn financial performance of the energy network firms and compared these to returns seen in the wider market.

A longitudinal study of the financial performance of regulated networks compared to the wider market, after adjusting for the difference in risk profiles, would provide empirical evidence as to the validity (or not) of the claims by the distribution networks about the WACC guideline development and provide the AER with support for its view that the guideline delivers an efficient allowance for the cost of capital.

5.1.5 Conclusions on preliminary decision on WACC

The ECCSA considers that the AER should apply its WACC guideline in its entirety. The ECCSA considers that there has been little new information provided that causes the need to deviate from a guideline that has only been in operation for 15 months.

The ECCSA points out that the existing guideline has considerable conservatism built into it. In addition to the points made above, the ECCSA points to the setting of the equity beta (where the point estimate is set at the highest point of the credible range) and in the market risk premium (where the set point is also at the higher end of the credible range) also add considerable conservatism into the WACC calculation.

Because of the AER approach at building in conservatism at each assessment point, there is no certainty as what the overall conservatism the AER has allowed into the WACC development. The AER approach effectively results in a compounding of the levels of conservatism and as a result is likely to significantly overstate the amount of conservatism that is being provided.

The ECCSA considers that, rather than follow the AER approach at building conservatism at each point in the development of the WACC it should set the parameters at the most likely equitable points and then add a defined amount of conservatism at the conclusion of the calculation if this is considered to be necessary.

5.2 Pass through events

The use of “pass throughs” is a mechanism for the regulated entity to reduce its risk by passing these risks onto consumers. Regulators have been inclined to accept this approach as they (rightly) fear that an allowance in the costs to accommodate this risk might be too high reflecting the likelihood of exogenous low probability high impact events.

In the current Rules there are defined elements where the "pass through" of actual costs is permitted. In addition to the Rule based pass throughs SAPN sought for a number of new pass throughs be allowed:

Approved in previous determinations:

- Natural disaster
- Insurance cap exceeded
- Insurer credit risk

New categories proposed:

- Kangaroo Island (KI) undersea cable failure
- Native title
- Uncontrolled unexpected general cost increase
- Retailer insolvency under materiality level

The ECCSA notes that the AER has accepted the first three pass throughs but with revised wording to that proposed by SAPN. The AER (rightly in the view of ECCSA) did not allow the other four pass throughs.

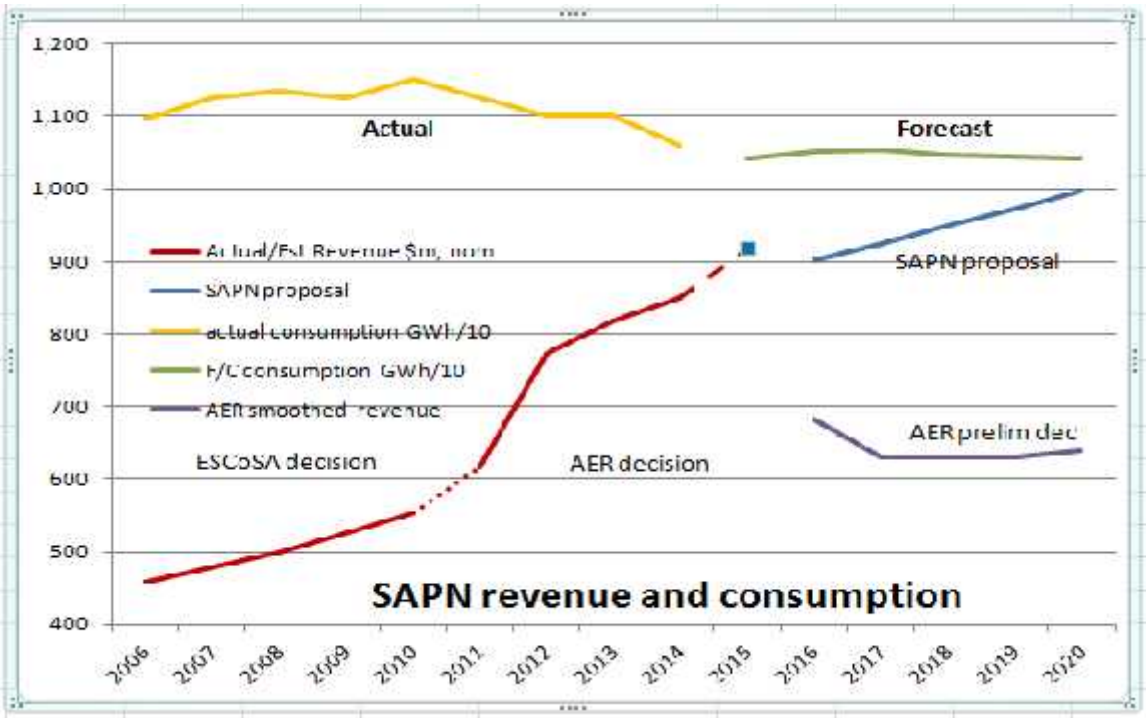
The ECCSA considers that the AER has correctly addressed the claims for pass throughs.

However, in its reasons for not approving the KI undersea cable failure pass through, it makes reference to its decision to allow the costs for building a duplicate to the existing undersea cable. The ECCSA does not consider that there should be a duplicate cable provided (the ECCSA considers that the undersea cable should be a contingent project) and equally does not consider SAPN should be provided a pass through in the event of failure.

5.3 Revenue allowed and the impact on consumers

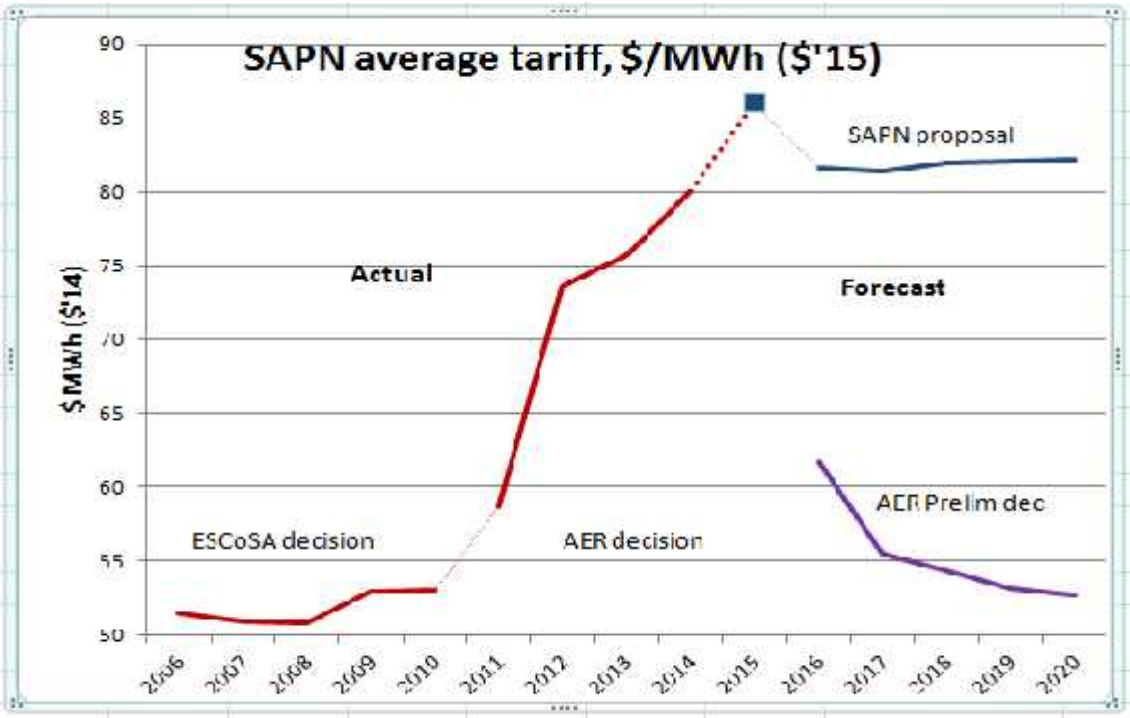
The SAPN application has its revenue continuing to increase even though there was a massive increase in revenue throughout the current period. In comparison, the AER preliminary decision shows the impacts of the massive hike in allowed revenue during the current period has been reversed, with the allowed revenue now being in keeping with the trend seen in the period prior to the current period. This is consistent with a market that has forecast lower demand than has been seen in the past and lower consumption than seen historically.

The following chart shows the actual revenue and consumption to date and forecasts for revenue and consumption and the AER preliminary decision.



Source: SAPN application, SAPN economic benchmarking data templates, SAPN benchmarking RIN 2013/14, AER prelim decision

The outcome of the AER preliminary decision has average tariffs returning to more appropriate levels, as the following chart shows.



Source: SAPN application, SAPN economic benchmarking data templates, SAPN benchmarking RIN 2013/14, AER prelim dec

Whilst the return to long term average tariffs is welcome, it must be stressed that these reflect a low rate of return compared to levels seen in the current period and the period prior to that. The high rate of return in the current period coupled to significant investment has provided SAPN with significant excess profitability.

The fact that despite the low cost of capital required in the forecast period, the fact that average tariffs are still higher than those seen over the longer term, is indicative of over-investment in the current period, imposing on future consumers a significant penalty as this excess spare capacity is paid for.

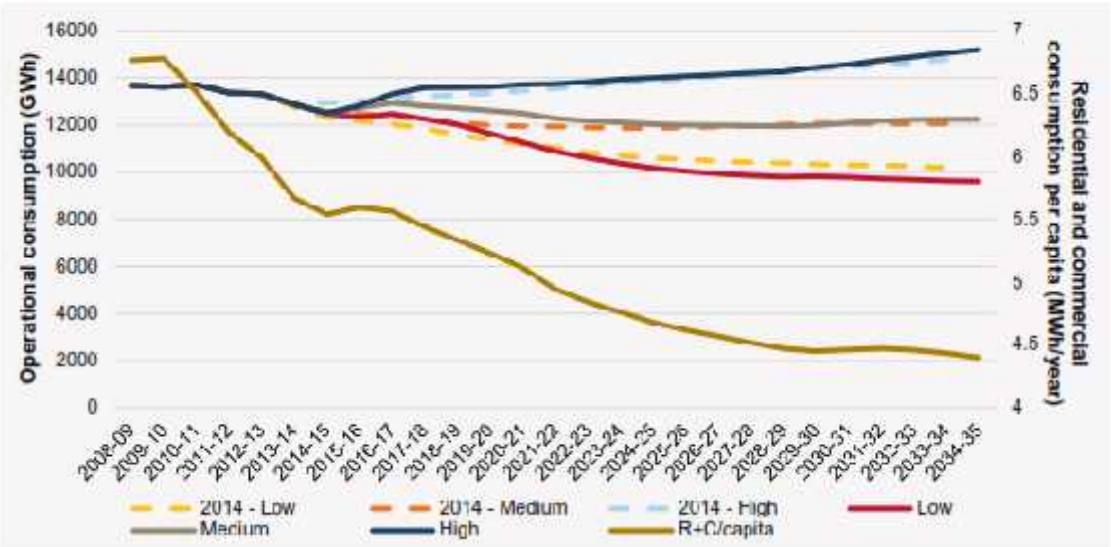
In its response to the SAPN proposal, the ECCSA commented that affordability of electricity supplies is a major issue for consumers and that the continuation of the high prices implied by the SAPN proposal would exacerbate the affordability issue. The ECCSA notes that the AER preliminary decision will lead to a lessening of the pressure on consumers facing affordability issues.

6. Forecasts and escalators

6.1 Demand and consumption

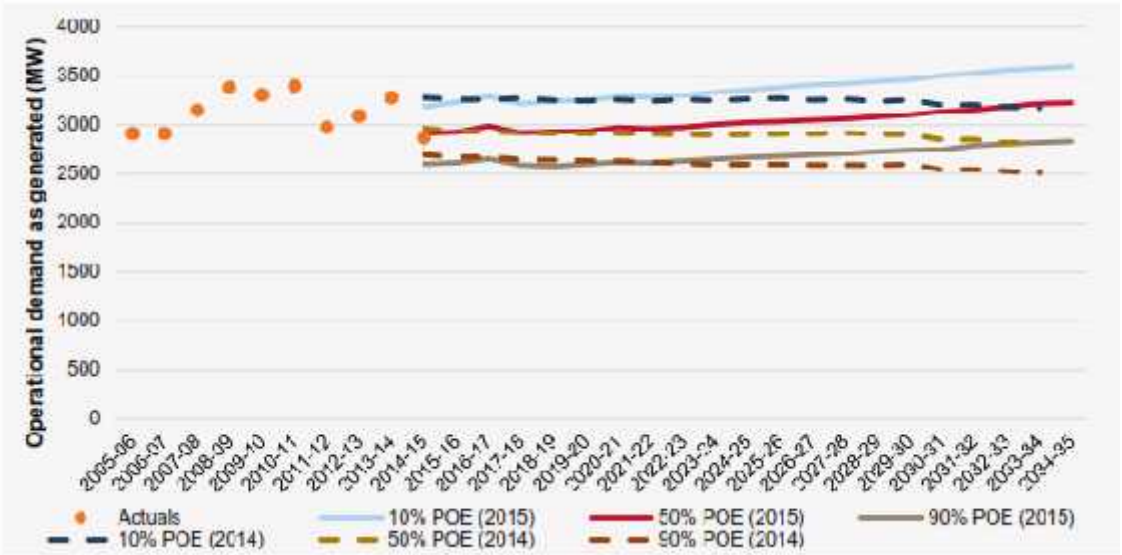
Since the SAPN proposal was prepared and the ECCSA response to that proposal was written, AEMO has released its 2015 NEFR. This has provided a view that there is no expectation that state wide demand and consumption will exceed the levels seen in 2009 and 2011 for the next regulatory period and probably well beyond that period. This is shown in the two following charts

Figure 31 Comparison of low, medium and high forecasts for South Australia



Source: AEMO NEFR 2015

Figure 33 Summer 90%, 50% and 10% POE maximum demand forecasts for South Australia



Source: AEMO 2015 NEFR

The updated forecasts are still consistent with the forecasts made in the 2014 NEFR and therefore the independent assessment of demand and consumption remains consistent comparison with the SAPN forecasts provided in its proposal.

Therefore the commentary provided by ECCSA in its response to the SAPN proposal is still valid

The current decline being seen in peak demands also shows a severity of the peak demands is also declining indicating that the likelihood that the peak demand over the next decade will exceed the 10% PoE forecast is relatively low and if it does, the severity of any breach is more than likely to be of limited duration.

This means the limited durations of any breaching of the 10% PoE forecast could more readily be managed in a more cost effective way by the introduction of demand side options rather than continual increases in network capacity.

6.2 Labour

In its response to the SAPN proposal, the ECCSA considered that:

- Capex and outsourced labour costs should be adjusted for forecast movements in the DAE construction LPI
- SAPN direct labour costs should be adjusted for forecast movements in the DAE EGWW labour LPI
- Productivity improvement be stated as explicit adjustments to the cost allowances

Specifically, the ECCSA commented that the SAPN Enterprise Agreement (EA) should not be used to adjust for labour cost movements and included reasons for this. The AER preliminary decision has extended on the ECCSA views and reinforced the ECCSA views that using an EA was not appropriate.

The AER in its preliminary decision concludes that all labour costs should be escalated using the DAE EGWWS wage price index (WPI). The ECCSA considers that this is an appropriate approach to adjust for expected movements in labour costs.

Where there is a difference to the ECCSA view, is that neither SAPN nor AER consider that there should be an adjustment to reflect productivity growth. The AER points out that overall labour price increases less productivity improvements will, over the long term match the general growth in costs (eg the CPI movement). The ECCSA agrees with this conclusion. Therefore to include for wage price growth but exclude a productivity growth factor implies

that, all other things being equal, prices for the network services will increase in real terms.

As both the AER and SAPN consider that as SAPN efficiency is at or close to the efficient frontier, then further increases in productivity will not (cannot?) occur (ie that there is no catch up in efficiency to be achieved). While this is true, it does not mean that further efficiencies cannot be achieved. In fact, if there is an expectation that wages growth will exceed overall escalation in the economy, then there must be a compensating improvement in productivity. As has been seen, SAPN efficiency has been falling considerably in recent years (see AER benchmarking studies showing SAPN partial factor productivity of opex has fallen by some 30% over the years 2006 to 2013) and not requiring an improvement in productivity will continue this trend.

The ECCSA points out that all of its members have to continually improve on their productivity merely to "stay still" in regard to market share - those with lower productivity lose market share and therefore have lower profitability.

The ECCSA considers that the AER has erred in not applying a productivity factor in the forward looking assessment of the rate of change calculation.

6.3 Materials and land

The ECCSA notes that the AER considers that non-labour factors (such as materials and land) will grow in cost at the same rate as CPI. This is a significant move away from the SAPN approach where these factors all show an increase above CPI in the forward looking price adjustments.

In its response to the SAPN proposal, the ECCSA noted that there was concern about the forecasts of future prices such as variability between forecasters and the use of futures pricing where it is apparent that futures prices are not as robust as might appear. Further the ECCSA noted that the mix and proportions of materials used in the development of an overall materials index movement showed considerable variation over time and between different networks.

The ECCSA notes that the AER has provided a table of expected growth in materials prices provided by a range of forecasters and this highlights that there are massive differences between the forecasters for a range of materials. The other concerns outlined by the ECCSA have also been addressed in the AER analysis.

Based on the clear observations that there is:

- Uncertainty how the base material price movements equate to manufactured items actually used by SAPN

- No certainty (even consistency) on the weightings of the different materials used
- Wide variances in forecasts for the same materials by different forecasters
- Concern that the futures market prices do not really reflect actual prices (eg they tend to reflect spot prices rather than long term contract prices)
- Variance in forecasts of exchange rates by different forecasters and then again with actual exchange rates seen after the event

With these concerns the AER has considered that the CPI is an acceptable surrogate for expected movements in materials prices. The ECCSA concurs.

Further, the AER notes that the CPI also includes for movements in various land related costs (eg rentals) and therefore can be used as a surrogate for movements in land costs. Again, the ECCSA concurs that this approach is more robust than attempts for forecast the future.

6.4 Growth

The ECCSA notes that SAPN used growth in customers, network size and workforce size as its drivers of output growth. The ECCSA disagreed with two of these and considered that growth in customer numbers was a driver for increased opex.

The AER assessment of growth is based on customer numbers, circuit length and ratcheted maximum demand with a set weighting for each element. The ECCSA considers the AER approach is more reflective of reality than the SAPN basis for assessing output growth. Whilst the ECCSA might disagree with the weightings applied by the AER, it considers that the AER approach provides a much sounder basis for developing output growth than that proposed by SAPN.

7. Pricing Methodology

Representatives of ECCSA have been involved in some of the discussions SAPN has held regarding the new approach SAPN proposes for its tariff development. The ECCSA is very concerned about what SAPN is proposing.

It would appear that tariffs for some consumer classes will rise while some for other classes will fall considerably. Large consumers are seeing tariff rises but SAPN has not explained why this is so. Much of the increased costs proposed by SAPN have little to do with investment for the HV and subtransmission customers yet that is where the higher tariffs are being applied.

The ECCSA has consistently maintained that cost allocation should reflect the amount of the assets used by each customer and this will provide an equitable outcome for all consumers and ECCSA has been advised by representatives of small consumers that this approach is appropriate.

The ECCSA is concerned that SAPN might have allocated to large customers remaining connected to the SAPN networks the zone substation and subtransmission assets that have been made redundant or have significant spare capacity as a result of lower demand and consumption caused by demand side actions (eg PV), government action and wider market movements causing industry closures. There has been no discussion about how the costs for surplus capacity and/or surplus assets should be allocated - whether by those customers remaining connected, by all customers or even by SAPN.

The ECCSA considers that the AER must address how the allocation of surplus capacity and redundant assets are to be allocated in the development of tariffs. The AER certainly cannot just leave it up to the various networks to do this in isolation as this will result in considerable diversity of outcomes across the NEM and potentially result in perverse outcomes.