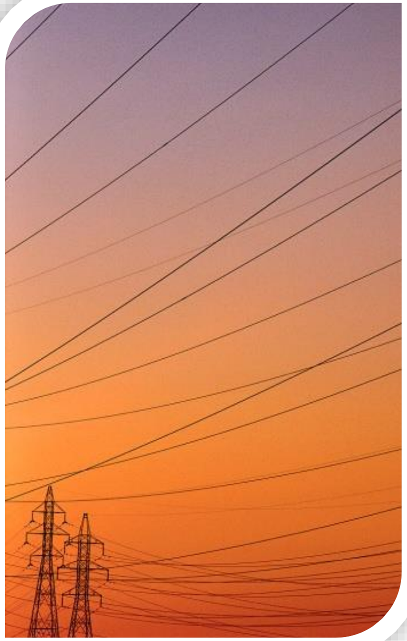
SAPN 2020-25 – AER Public Forum

Consumer Challenge Panel
4 April 2019



CCP14

Mark Grenning (Chair)

Louise Benjamin

Mike Swanston

Our role as a *Consumer Challenge Panel…*

- We advise the AER on:
    1. Whether the network businesses' proposals are in the long-term interests of consumers, *and*
    2. The effectiveness of network businesses' engagement activities with their customers –
        i. who, how, when and what issues SAPN engaged with its customers on,
        ii. how this engagement has influenced the revenue proposal,
        iii. do consumers agree with the revenue proposal, and
        iv. is there a process for ongoing review of CE/continuous improvement
- We consider this role in the context of the National Electricity Objective (NEO)
- Emphasis on "challenge" to both the network and the AER
- Aim of getting to a proposal that is "capable of acceptance"

The AER is guided by the NEO

NEO:

*“to promote efficient **investment** in, and efficient **operation** and use of, energy services for the **long term interests of consumers** of energy with respect to **price, quality, safety, reliability and security** of supply of energy.”*

Therefore, we consider:

- How prudent and efficient is proposed capex/opex expenditure?
- How will costs be allocated to different consumer groups?
- How does the proposal reflect the changing electricity market and long-term issues?

CCP scope in the AER Building blocks

In scope	Out of scope
Proposed capex in period	Rate of return – AER binding guideline in December 2018
Proposed opex in period	Opex productivity – AER decision March 2019 for 0.5%/yr
Application of incentive schemes	Taxation allowance – AER decision in December 2018
Tariff Structure Statement	Regulatory depreciation
Consumer engagement	

The ‘in scope’ items account for ~ 35-40% of SAPN’s proposed revenue

What we will cover today

- Prices
- Opex productivity and step changes
- Distributed Energy Resources (DER)
- Information and Communication Technology (ICT)
- Tariffs
- Community and stakeholder engagement

But to begin with we will go back to our comments on the Draft Plan and discuss the changes from the Draft Plan to the Regulatory Proposal

Why we were critical of the Draft Plan

- A ‘Business as usual’ plan:
  - we considered that it did not aggressively continue to look for ***all possible efficiencies*** nor deliver all achievable price reductions through efficiency and innovation
- The majority of SAPN’s objective of “delivering better outcomes at a lower price” has been achieved by external factors other than specific actions by SAPN to deliver the lowest costs and most efficient network service possible
- The relatively small headline fall in prices in year 1 was substantially due to SAPN applying the lower rate of return in the AER’s Draft Guideline
  - which SAPN was strongly opposed to
  - applying SAPN’s preferred rate of return would probably have resulted in a rise in nominal prices
- Similar points were raised in many other submissions
- So we were looking forward to the Regulatory Proposal reflecting submission comments and subsequent consumer engagement

The regulatory proposal says a lot about keeping prices down

Throughout our engagement, our customers reinforced the importance of:

› keeping prices down;

p.6

At the same time there has been an increasing focus on electricity prices driven in South Australia (**SA**) by rapidly rising generation and retail charges – not distribution charges. Quite understandably, customers want to see downward pressure on electricity prices in all parts of the value chain.

p.3

It is a network that has been conservatively and prudently managed with an eye to reliability, safety and cost efficiency. That efficiency has ensured that prices for our services have – when taking account of inflation – been maintained at the same level as they were in 1999.

p.3

We will do all this while responding to stakeholder and customer concern about electricity price – delivering further reductions in our charges for 2020-25.

p.3

Actively look for efficiencies and innovate to stay at the efficient frontier and deliver price relief

p.17

Section 3:
Keeping prices down

But the proposed price falls are all due to AER WACC and Tax decisions that SAPN vigorously opposed

Nominal Price change on 1 July 2020	Residential (per customer)		Small – medium business 20 MWh/yr	
	$	%	$	%
As proposed	-40	-7	-111	-5
Adopting 2015-20 WACC parameters and 2015-20 RfR and 2015-20 tax allowance methodology	+11	+2	+75	+4

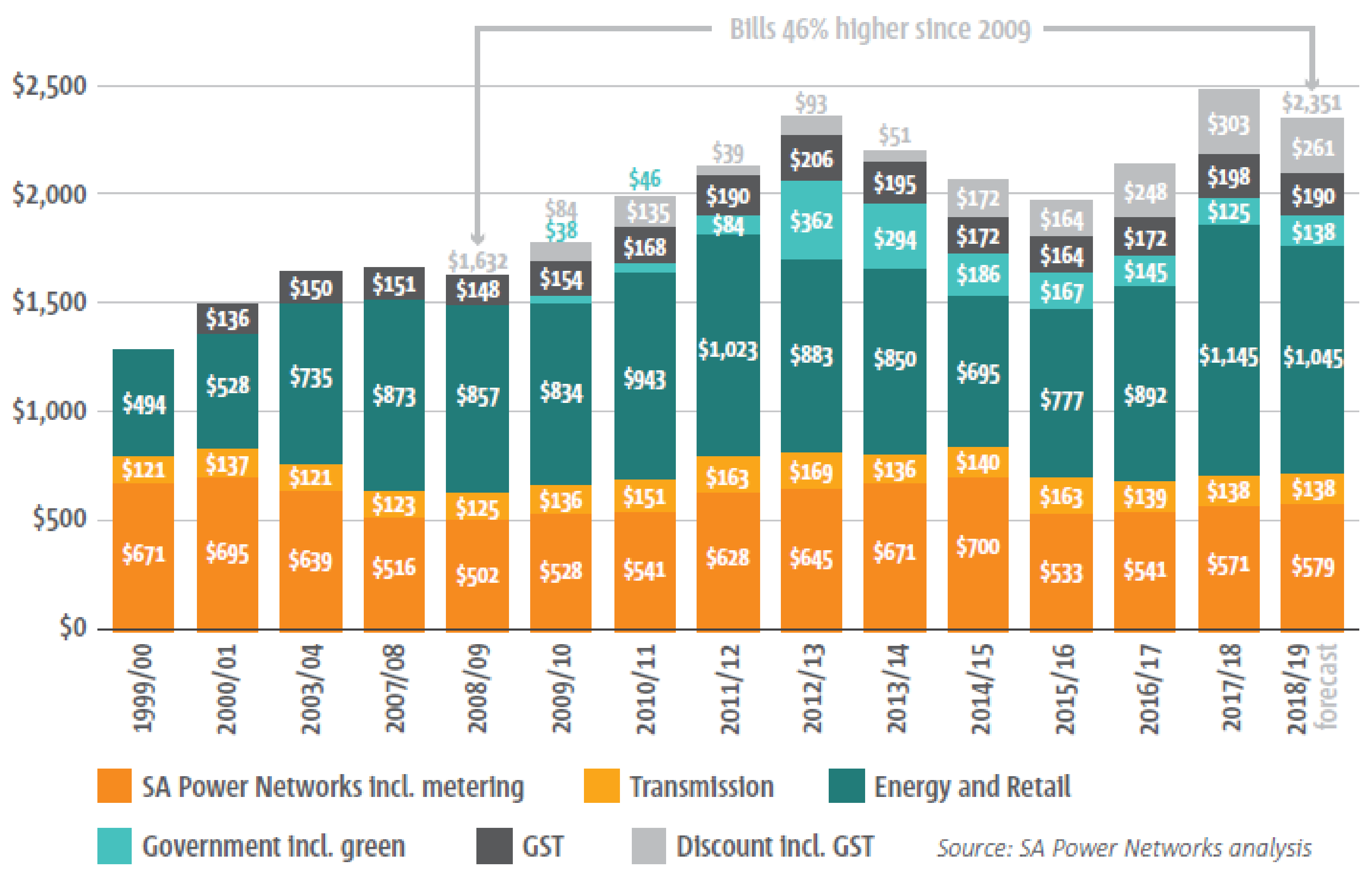
<u>2024/25 v 2019/20 5-year price comparison including and excluding recent AER decisions</u>

Nominal Price change on 1 July 2024 vs 30 June 2020	Residential (per customer)		Small – medium business 20 MWh/yr	
	$	%	$	%
As proposed	-5	-1	+49	+2
Adopting 2015-20 WACC parameters and 2015-20 RfR and 2015-20 tax allowance methodology	+49	+8	+250	+12

- And this does not include the opex productivity decision that SAPN also vigorously opposed
- What happens when the interest rate cycle returns upwards?

SAPN highlights its constant real price trend over the last 20 years

Figure 1.1: Average SA residential electricity bills ($June 2020)

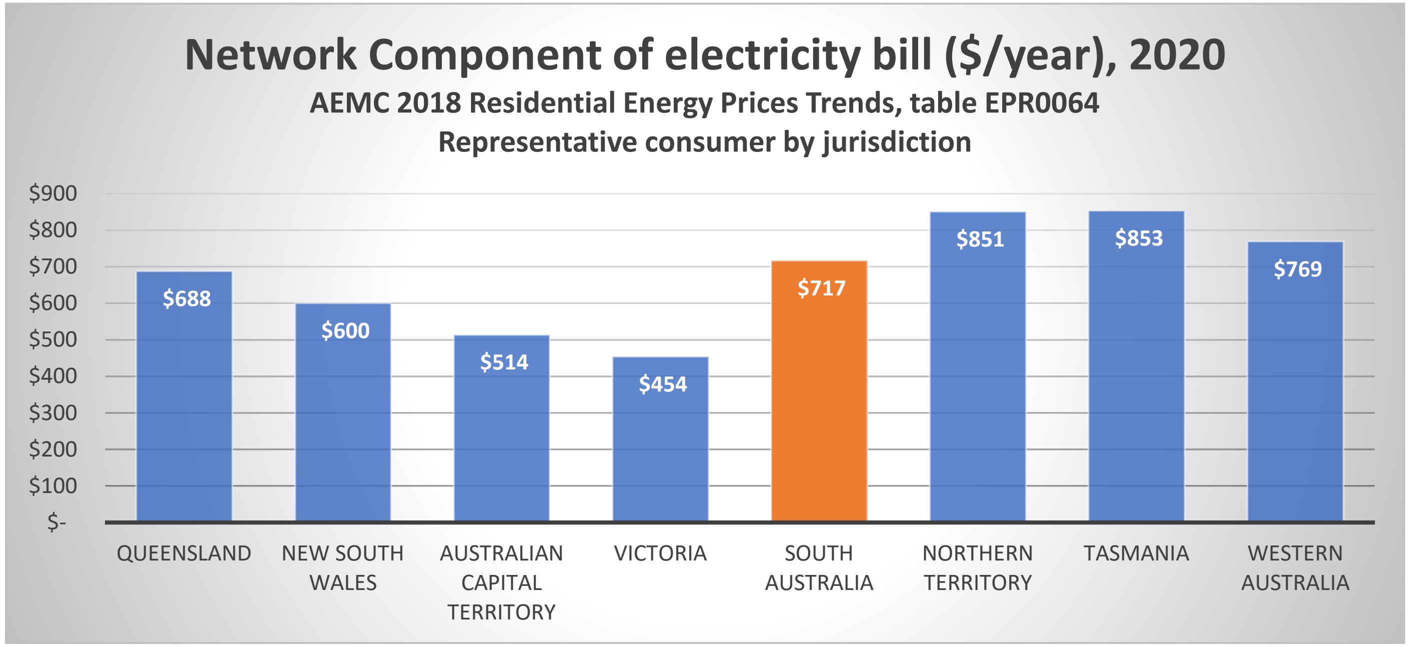


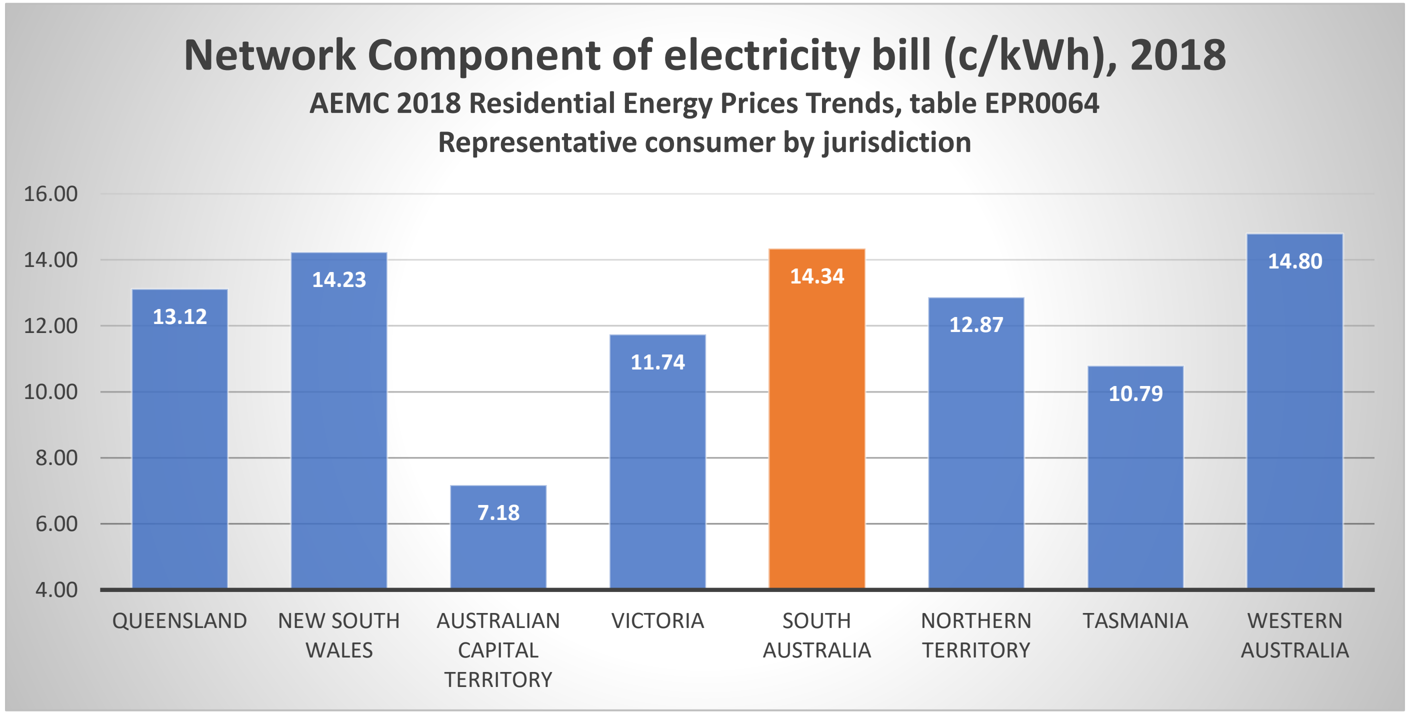
SAPN points to rises in other components esp “energy and retail” that have been the driver of higher retail prices

But keeping to CPI is not all that flash for such a capital intensive industry

The table shows the nominal change in a variety of Adelaide CPI and Australian manufacturing price indexes for the period September qtr 1999 to December qtr 2018

Index	% change	Index	% change
CPI	+66%	Inputs to manufacturing industry	
Food	+70%	Machinery and equipment	+40%
Clothing and footwear	-9%	Transport equipment	+34%
Furnishings, household equipment and services	+18%	Fabricated metal products	+72%
Transport	+49%	Polymer and rubber	+55%
Communication	-3%		
Recreation and culture	+22%		





And looking at how SAPN compares with other networks is also relevant

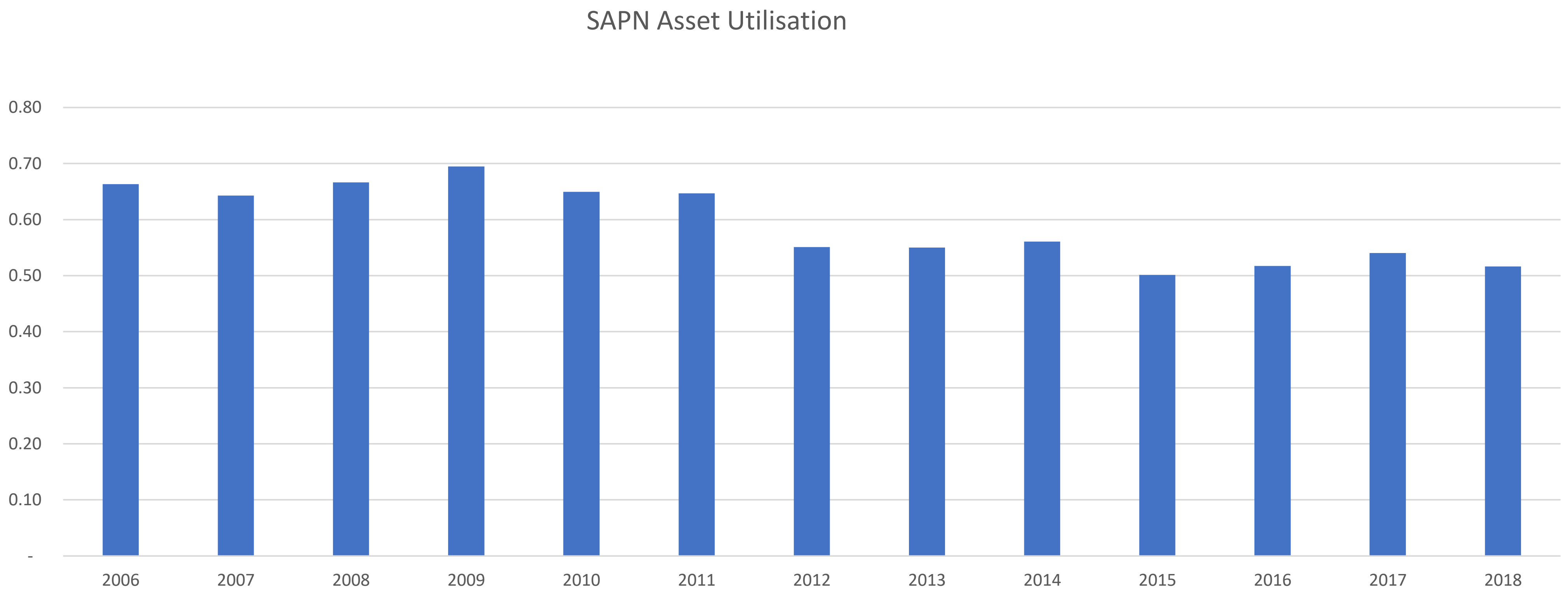
The AEMC data suggests SAPN is (at best) ‘middle of the pack’ in DUoS charges for customers.

Whilst CCP accepts there are many variables that impact DUoS across jurisdictions, including usage, we suggest that the data supports the fact that SAPN may have a real opportunity to reduce costs and therefore prices.

Note: Data for Qld is SE Qld only due to impact of the Qld QCA decisions.

Source:
AEMC report - Residential Electricity Pricing Trends 2018

And looking at its capacity utilisation trend suggests no continuous improvement and an operation that is not "at the efficiency frontier"



Yes SAPN has one of the better DNSP asset utilisation levels but consumers are also interested in the absolute position – not just the relative position

There was little change between the Draft Plan and the Regulatory Proposal

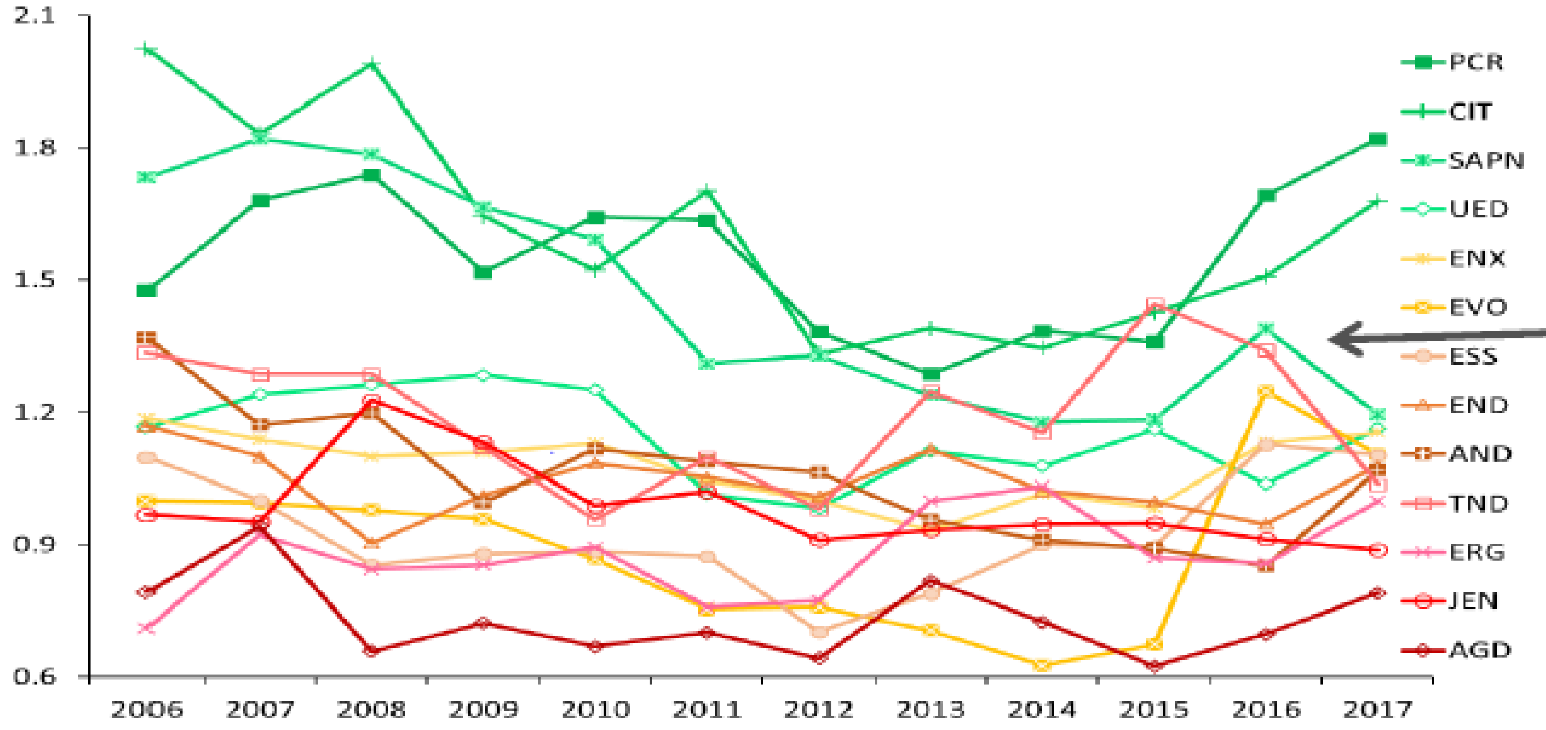
$June 2020m	Forecast 2015-20	2020-25		% change from 2015-20 Forecast
		Draft Plan	Initial Proposal	
Total revenue	3,909	3,893	3,915	0
Capex	1,728	1,850	1,741	+1%
Opex (excl debt costs)	1,324	1,468	1,530	+16%
RAB (at end of period)	4,418	4641	4,478	+1%

- Most of the changes seems to have been a result of a reaction to outside influences eg capex/opex trade-off and increased depreciation allowance resulting for the tax allowance decision and revised GSL payments
- So the $176m reduction in the tax allowance seems to have been offset by other increases

SAPN Opex

How productive is SAPN opex?

Figure 6-6: Opex MPFP by individual DNSP, 2006-17[19]



SA Power Networks decline in 2016/17 due to:

- high GSL costs;
- high emergency restoration costs; and
- reliability decline driven by an unprecedented increase in major weather events.

- Trend decline over the period 2006-2017
- SAPN has stayed in the top 3-4 because the others have also had a trend decline

Key Issues

- AER to apply 0.5% per annum productivity ie movement out of the frontier
  - the frontier is not static in a workably competitive market
- Selection of 2018/19 as the base year which is forecast to be the second highest opex in 2015-20
  - we leave that to the AER to evaluate
- Where are the benefits for customers of the extensive ICT program?
  - $40m per annum in recurring ICT must deliver some improved opex efficiency
- Stakeholders have raised concerns about data averaging of the labour costs given the low wages growth in SA
  - Why do network consultants consistently give higher growth forecasts than AER's consultants?
- AER should carefully review the very high step changes totalling $75m

Summary of proposed step changes ($2020m)

Cable and conductor minor repair	68.2
Critical Infrastructure Compliance	12.1
Cloud transition – Hosting	7.2
Cloud transition – Scheduling	3.8
LV Management	3.8
GSL Reliability	(19.9)
Total	**75.1**

"It is hard to accurately predict the future in a rapidly changing environment, so there will be some future costs that we have not included in our Proposal that we will have to absorb." Overview p.22

Why is it that we never see specific estimates or even general statements of the expected reductions in costs?

AER review of step changes

- $75m increase is after a step down of $19.9m for changes to GSL scheme (outside SAPN control)

- Biggest step up is the opex/capex trade off for reclassification for repairs of $68.2m
  - CCP14 is not convinced of the intergenerational equity argument

- AER should benchmark critical infrastructure compliance and cyber security expenses as part of ICT review to ensure consistency and lowest cost NEM wide

SAPN Capex


Cloud
Additive
Manufacturing
Robots
Simulation
Augmented Reality
Big data
System
Integration

Observations (1)

- Network performance and other key performance indicators (safety, environmental) appear stable or improving, against a background of capex underspend. This suggests a very strong case for any *increased* capital is needed – is the CESS benefit from the current period real?
- Repex – CCP is keen to ensure that SAPN work with AER modelling, recognising that modelling stobie pole replacement is not easy to benchmark. Overall, we generally support the SAPN repex proposal
- Augex – there are many valid reductions that have been delivered by SAPN, but these savings seem to be taken up again by increases in other initiatives
- There are multiple line items and a contingent project supporting SAPN's proposal for significant investment to permit maximum solar feed-in and VPPs. A 'total cost' view would be useful to help customers effectively consider the counterfactual arguments, options and SAPN's cost-benefit discussion
- We note the key position taken by SAPN (and other distributors) that DER investment will benefit ***all*** consumers through lower wholesale prices. This needs to be tested and clearly discussed in wider consumer forums

Observations (2)

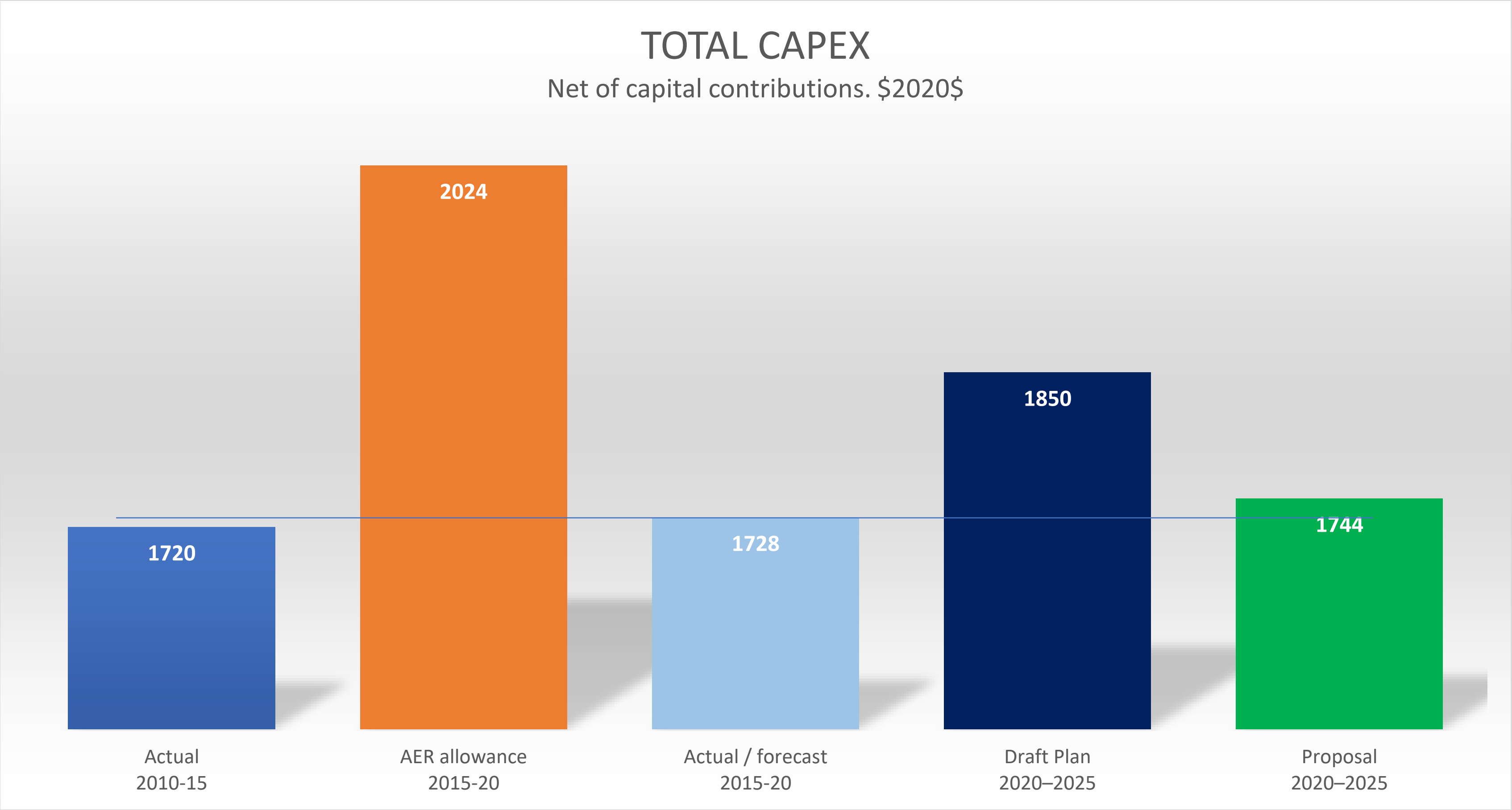
- Connections – the increased spend seems inconsistent with observations and related data
- ICT – The total spend is significant, with a large amount not directly linked to customer benefits
- Reliability – the increased expenditure is not supported based on ESCoSA position to maintain reliability standards as is. We believe that there is sufficient existing allowance for 'worst performing areas'

  The Commission's decision is to set network reliability standards to maintain reliability at current levels, rather than setting targets to improve or reduce performance. This final decision is supported by results of a customer survey showing that 73 percent of customers are satisfied with overall reliability outcomes, and have limited willingness to pay for reliability improvements.1 It is further supported by the results of the Commission's economic assessments, which show no clear economic benefit in setting targets to improve performance.

- Telecoms – there may be room for innovation here. Public carrier technology has come on in leaps and bounds in capacity and lower price, yet SAPN appears to maintain its own communication systems
- Property, vehicles – CCP supports AER analysis

The BAU capex proposal

- Total capex is similar to the current period forecast
- The amount claimed for 2020-24 has reduced 6% since the draft plan was discussed at the deep dives last year, back to a level similar to the current period forecast.

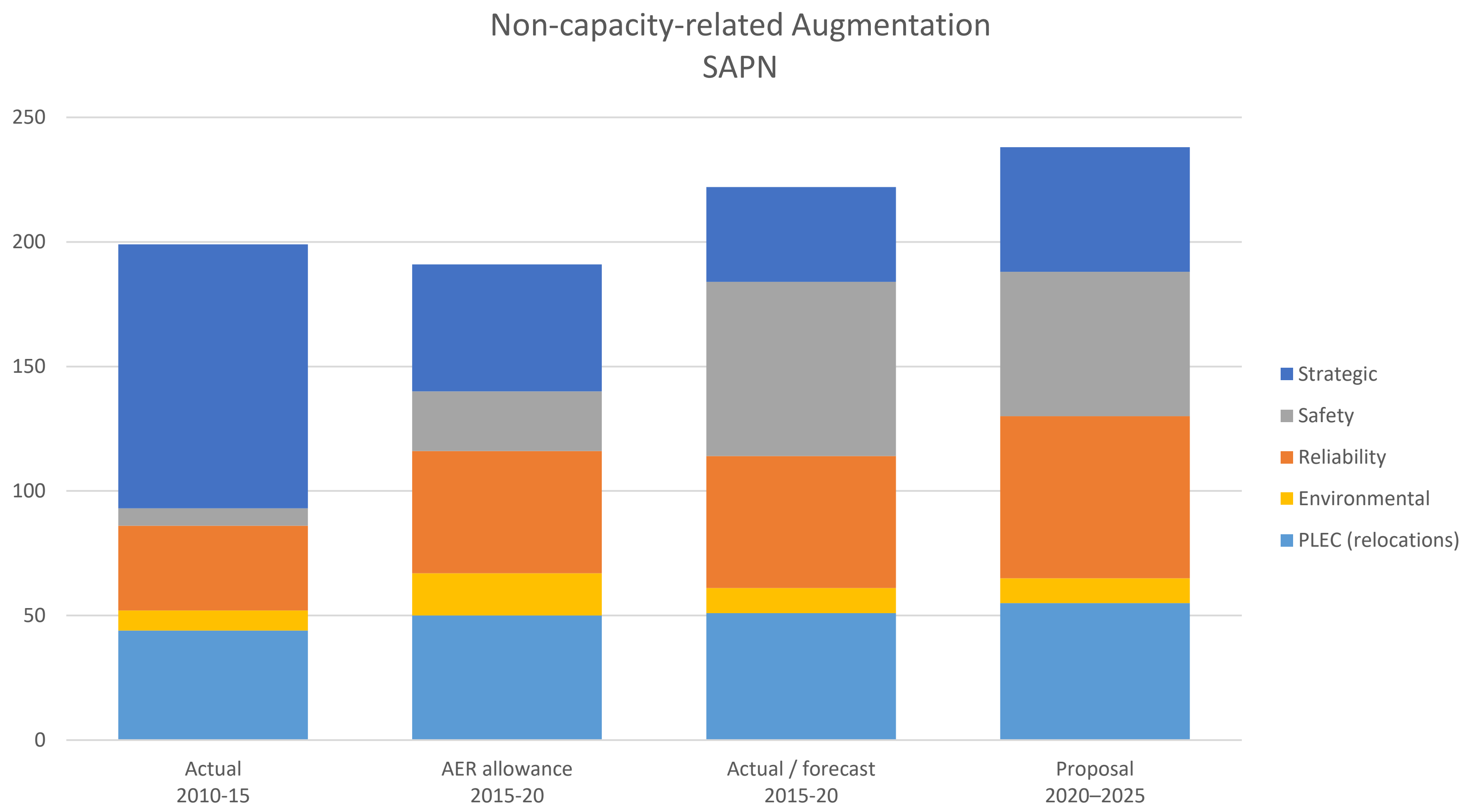


Non-capacity related capex proposal

Non-capacity related investment is increasing

Are these increases justified ?

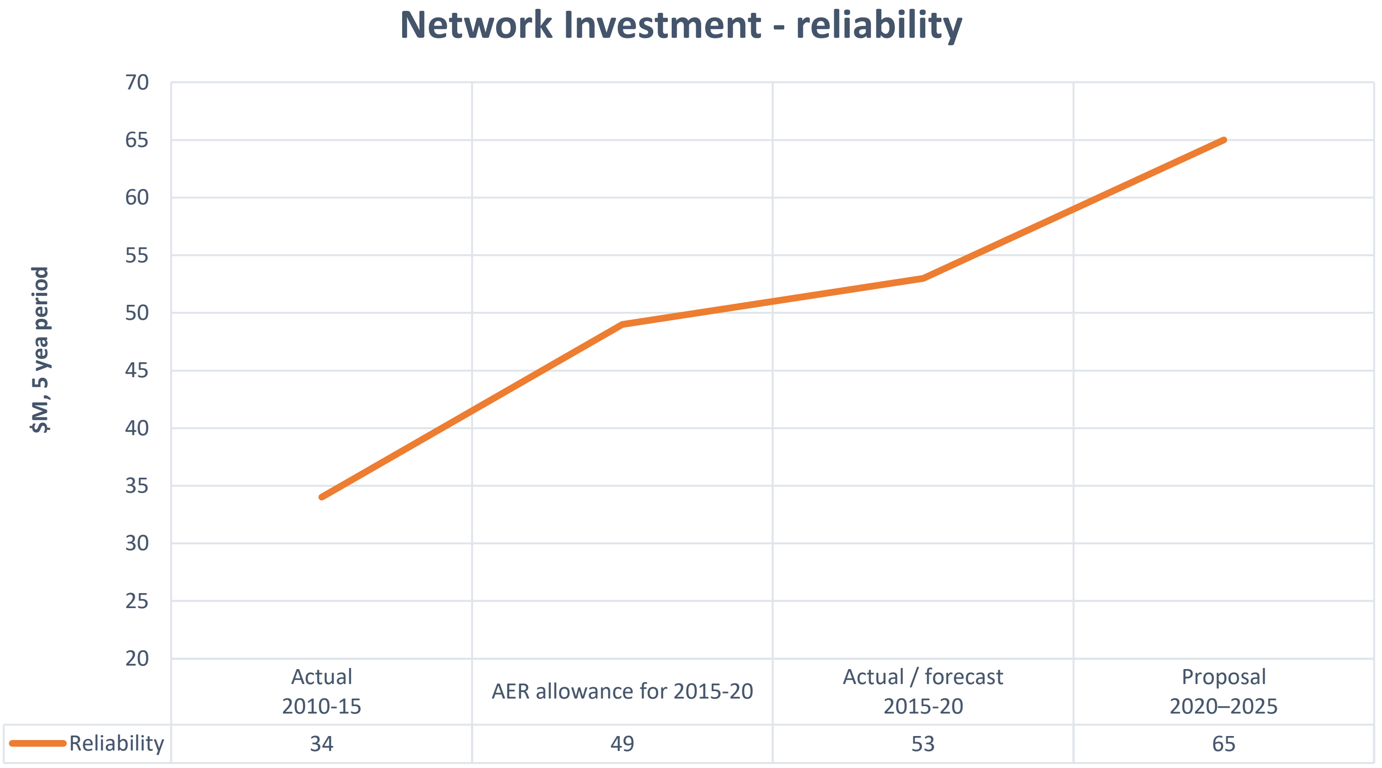
SAPN provided a lot of information in the deep dives regarding the plans, but we believe the alternative options, steady-state plans and cost / benefits were not made clear.



Network reliability improvement capex proposal

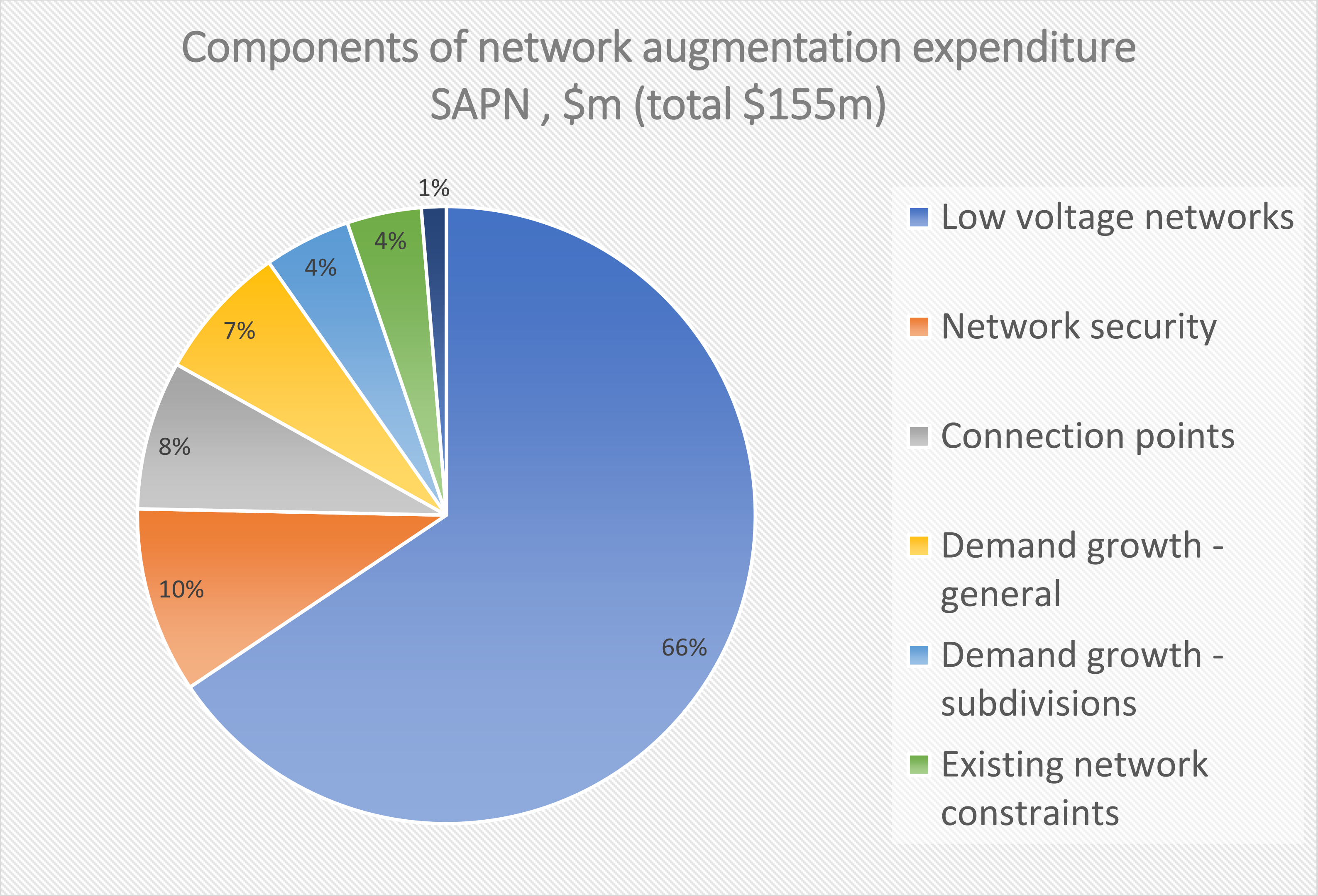
- Significant increased spend on reliability for worst performing feeders eg Eyre Peninsula
- Support from Wine industry and Business SA
- No support from SACOSS for spend above mandated levels
- ESCoSA says *"SA Power Networks is expected to spend about $37 million to maintain current reliability standards over the five years - similar to the predicted total costs for the current period (2015-20) - rather than spending more on reliability above the standards and passing those increased costs on to customers. This will assist in constraining electricity costs: a key message from the customer survey and a key focus of the Commission's review*

(ESCOSA SA Power Networks 2020 reliability standards review, media release, 7 Jan 2019)



Augex and DER funding

- 2/3rd of augex investment is not related to demand growth (and therefore not associated with ‘increased revenues’)
- It is about low voltage networks and supporting unconstrained growth of solar PV exports to the grid
- The Strategic spend category also includes $32m for ‘Low Voltage Network Management’
- Is this spend clearly justified?
- What are the options, such as letting inverters self-constrain on critical days, or export limitation agreements with VPPs?
- Should all customers pay ?



DER Investment is very significant

- SA has highest PV penetration

  This is likely to rise given the Government's policies and subsidies for PV and batteries

- We commend SAPN on their early engagement with AER on the revised network of the future proposal reduced to $37m

  i. SAPN DER proposal has NEM wide implications
  ii. Energy system is in transition as storage and new business models emerge
  iii. AER must avoid rushing to an unproven solution that might become stranded assets in the RAB
  iv. AER should carefully check that the SAPN revised proposal maximises opportunities for market solutions rather than network curtailment solutions. Is $27m for the LV model and $10m for publishing and curtailment?

DER Investment is very significant

- $100m+ Augex spend also related to DER and LV management issues
  - AER should make total spend on DER related issues transparent
- CCP concerned with the assumptions underlying the Houston Kemp wholesale value analysis and the Newgate customer survey
  - CCP not persuaded that the 'social benefit' to all energy consumers, including the 50%+ who will not invest in DER, justify the fact that all customers will need to pay for this initiative
- Concern that SAPNs approach to DER continues to be driven by AEMO and its preferred DSO model
- New $79m+ contingent project "Electricity System Security" buried in Attachment 5
  - We would need a 'real life example' of the contingency to better understand the issue
  - The proposal as a contingent project was not discussed with community stakeholders
  - The critical issue is the existence of a RIT-D with meaningful opportunities for non network solutions
  - Other solutions include inverters, impact from solar sponge tariff, export limits from larger VPPs and possible rule change to charge for export

Connections

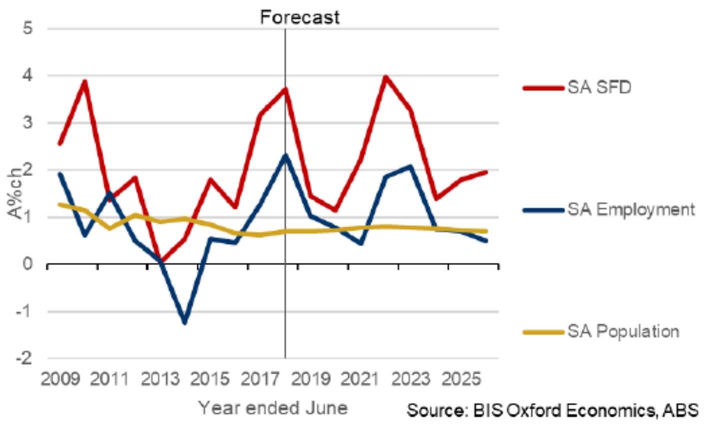
Customer connections is based on consultant's report. But the proposal does not make it clear why the proposed connection costs increase significantly ($30M, 20%) from the current period.

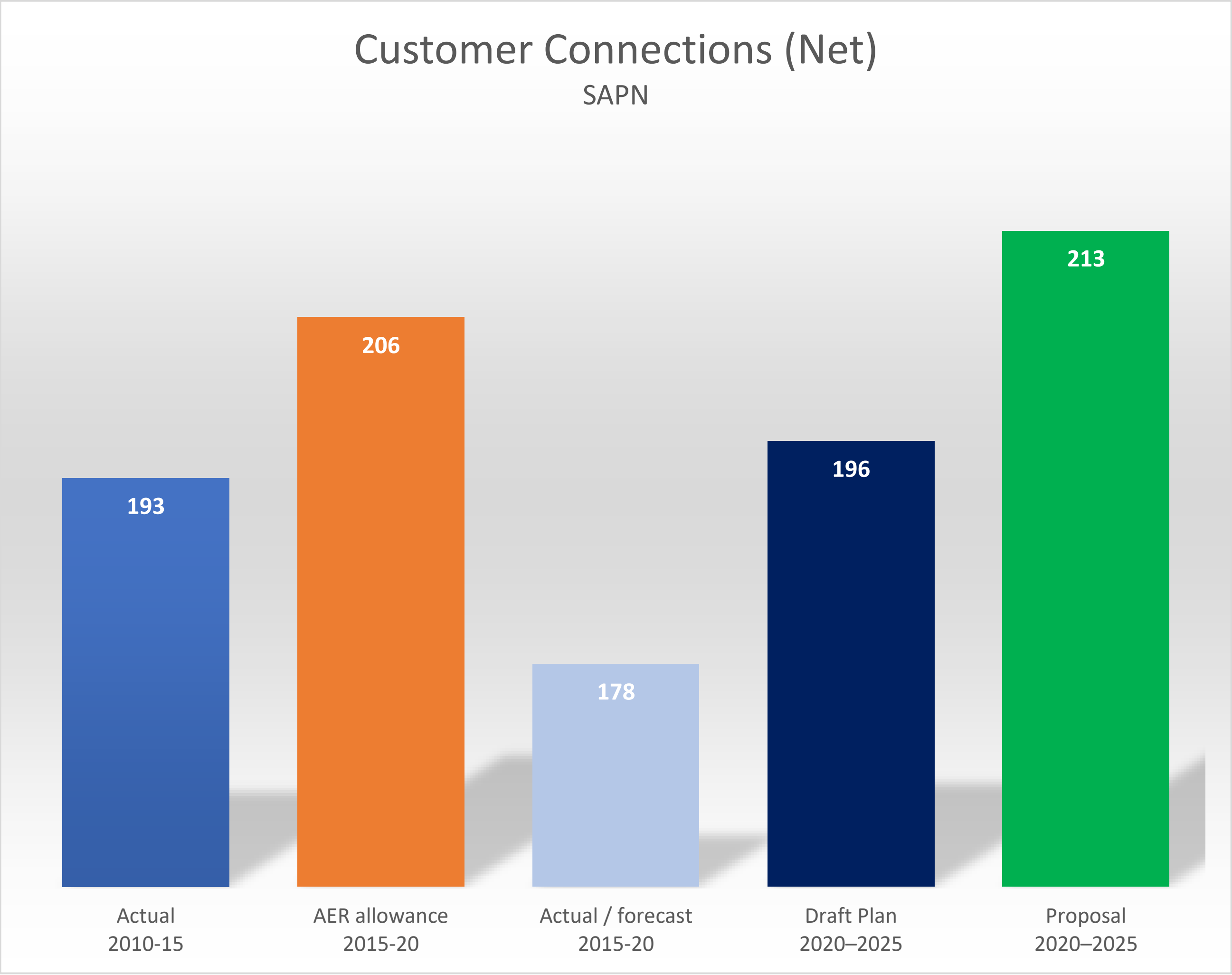
Population growth is flat 2009 – 2026, so why increase in connection costs ?

Further information to customers is required.

Gross Customer Connections Expenditure Forecasts 2025/26 **SA Power Networks**

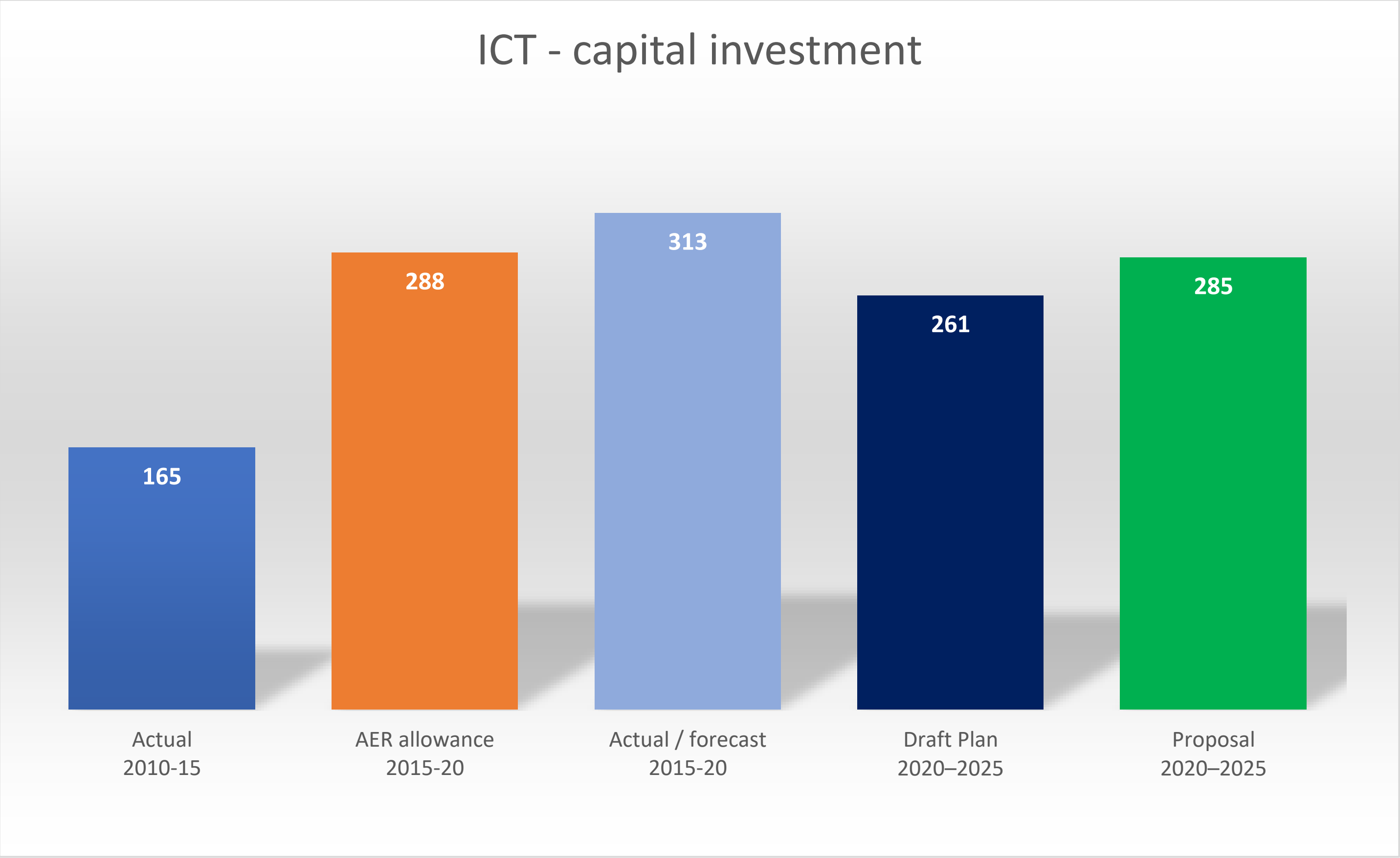
Figure 2.4 South Australia State Final Demand, Employment and Population Growth

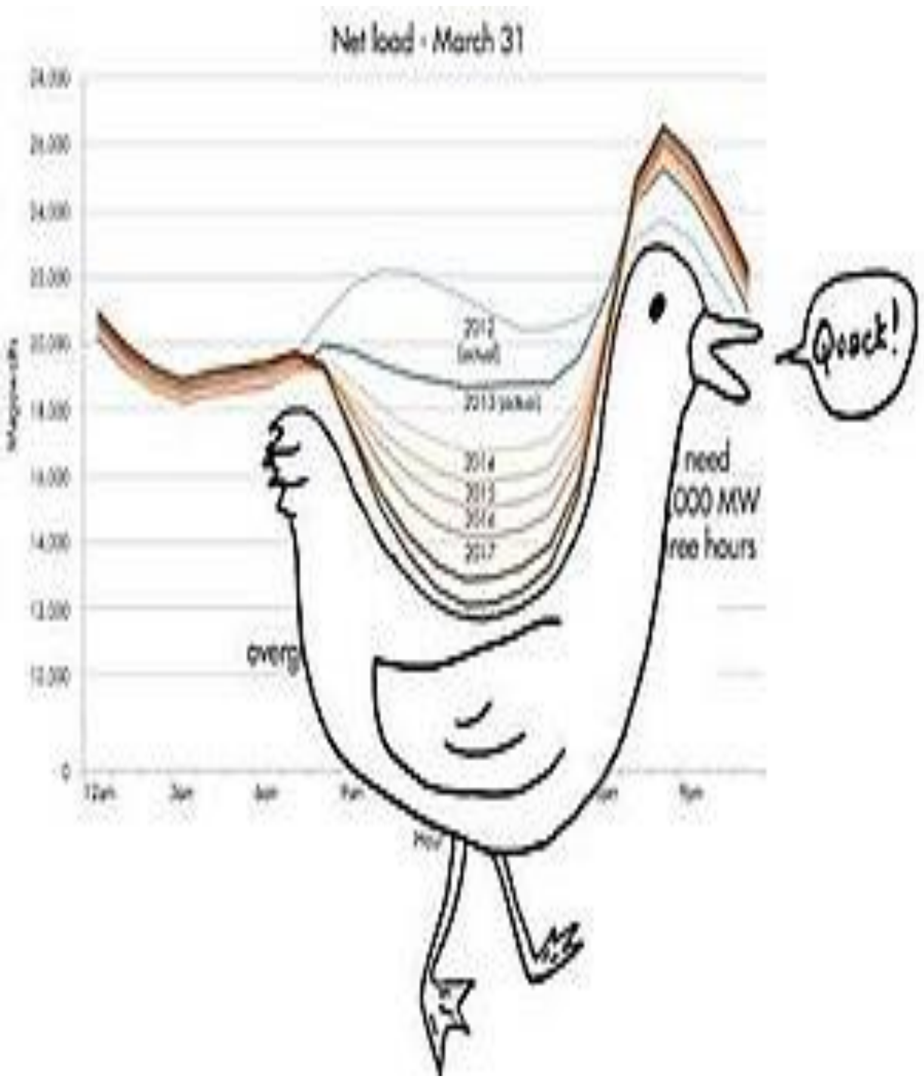




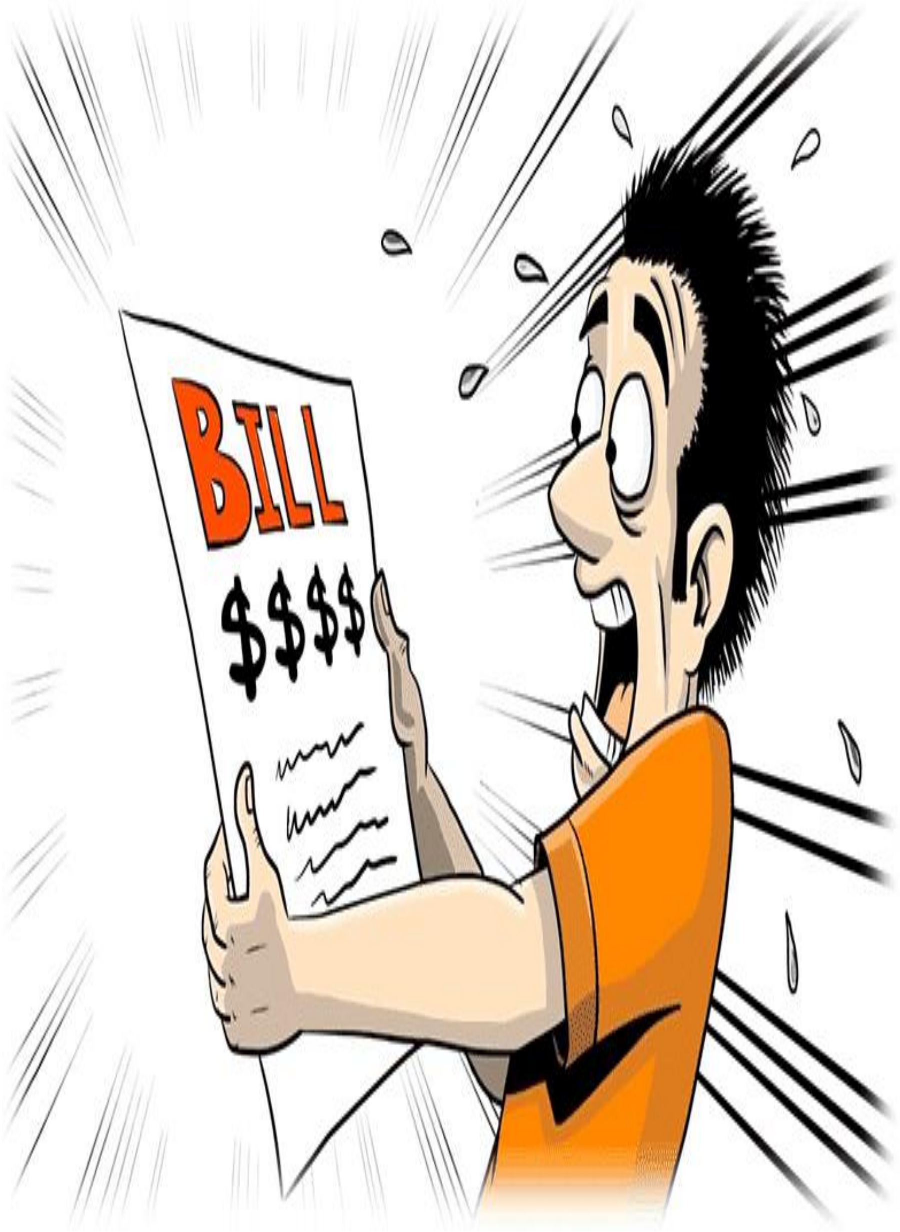
- **$598M** spent in this and next period (17% of total capex). Significant impact on depreciation and price
- $30M of projects for 15-20 didn't get done
- SAPN say benefits include repex benefit in 20-25 of $150M and $22.8M 'avoidance' benefits
- $207M (70%) recurring expenditure to 'maintain current service levels'. NO customer benefit analysis and poor counterfactuals
- $65M for business improvements
- Move to cloud includes opex steps increases as well
- SAP is 'end of support life' – replace CRM & billing. Justification is: "*need to be replaced to maintain the current levels of service*". Counterfactual is: "*not undertaking this upgrade in a timely manner will place core business services at significant risk.*" (Pg101 ATT 5 SAPN proposal) **Requires proof !**
- Another $100.3M repex benefit + $35.5M avoidance from Assets and Work Program?

ICT and the need for an ICT review





SAPN
TSS



TSS positive

- Our issues are more around the total revenue than how that total revenue is recovered in differential pricing
- Aim of cost reflective tariffs is to empower customers to make informed choices by providing better price signals—so customers know what it costs to use electricity at different times so that customers can make informed decisions to better manage their bills
- CCP strongly supports the ToU solar sponge tariff as a means of influencing customers to shift their load from the evening peak to the midday trough
- This is much better for customers than SAPN investing in more network
- We encourage SAPN to think even harder about DM opportunities to help with the solar trough
- RISKS: the demand forecast is inaccurate leading to price jumps between years
- Further inquiries: impact analysis to identify those households who may not be able to shift their load to the middle of the day

"***The changes........ will result in more equitable and fairer pricing that reflects how customers actually use the network. That is, the customers who contribute the most to the need to invest in the network will pay a fair share of this cost – it won't be borne by customers who do not contribute to the need to invest in the network***." SAPN proposal page 37

SAPN Consumer Engagement

Sooooooo much engagement

- Early engagement program with release of preliminary forecasts and a Draft Plan
- SAPN CCP and reference group excellent structure
- Constructive engagement with AER and CCP on Network of the Future investment
- Greater insight into value-based approach for repex
- Well organised and well attended by SAPN CCP, CCP14 and the AER
- Mostly pre reading in advance
- Well documented
- Independently facilitated with each session evaluated by facilitator
- Pie chart donuts very easy to follow
- SAPN received very detailed feedback about customers expectations around affordability, network of the future and ICT before and after the Draft Plan

What was the benefit for customers?

- Very big time and resource commitment by SAPN and all attendees
- Otherwise little evidence that SAPN applied what it heard in its Proposal
- ICT program increased by $23 million
- Network of the Future progress undone by $100m+ in augex and contingent project
- Increases in opex step changes and other capex proposal absorbing decreases in WACC and Tax review
- Proposal not transparent about the reasons for the price decrease
- Consistent opposition to WACC, tax and opex productivity
- Leading questions in Newgate survey on community attitudes to solar

Changes between the Draft Plan and the Revenue Proposal

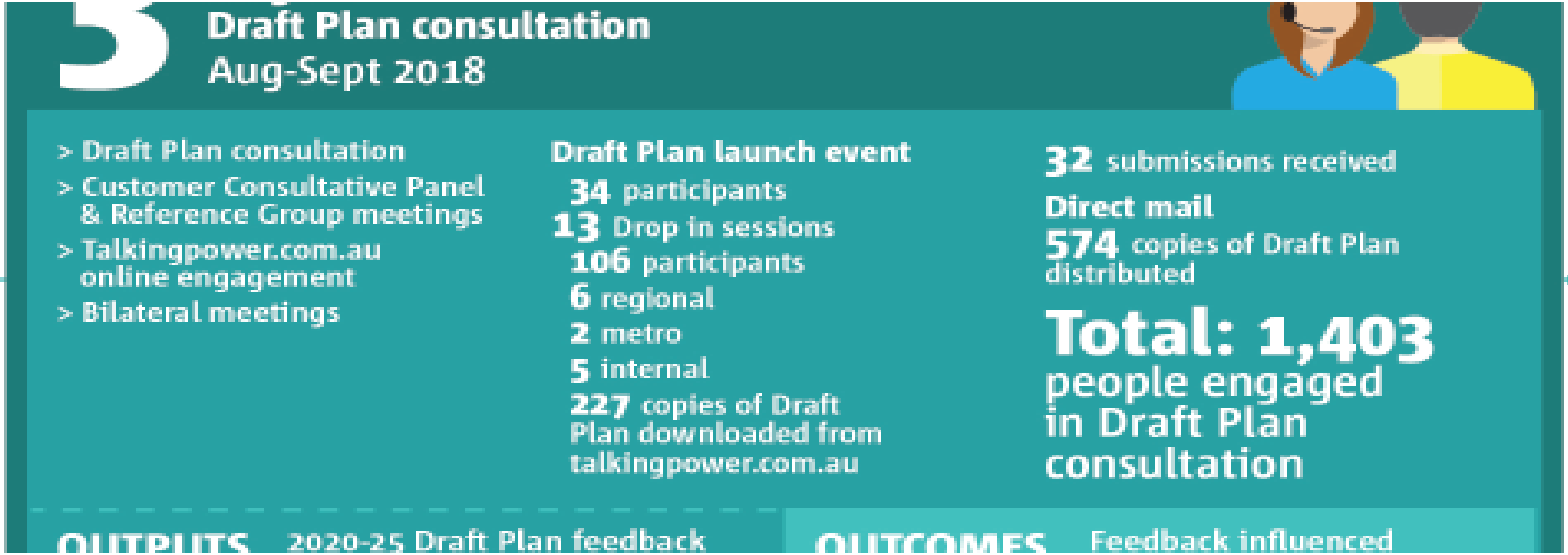
Net change in capex forecast	-\$109m
Net change in opex forecast	+\$62m
Net change in revenue forecast	**+\$22m**

- ICT expenditure increased by \$23m
- Connections increased by \$17m
- Capex/opex trade off from tax review \$68m
- Regulatory depreciation for short lived ICT assets increased by \$120m
- CESS benefit of \$70m

PLUS the "Electricity System Security" contingent project **in excess of \$79m** - not highlighted in the reg proposal as a change since the Draft Plan

Customers raised concerns about Price and about each of these expenditure categories

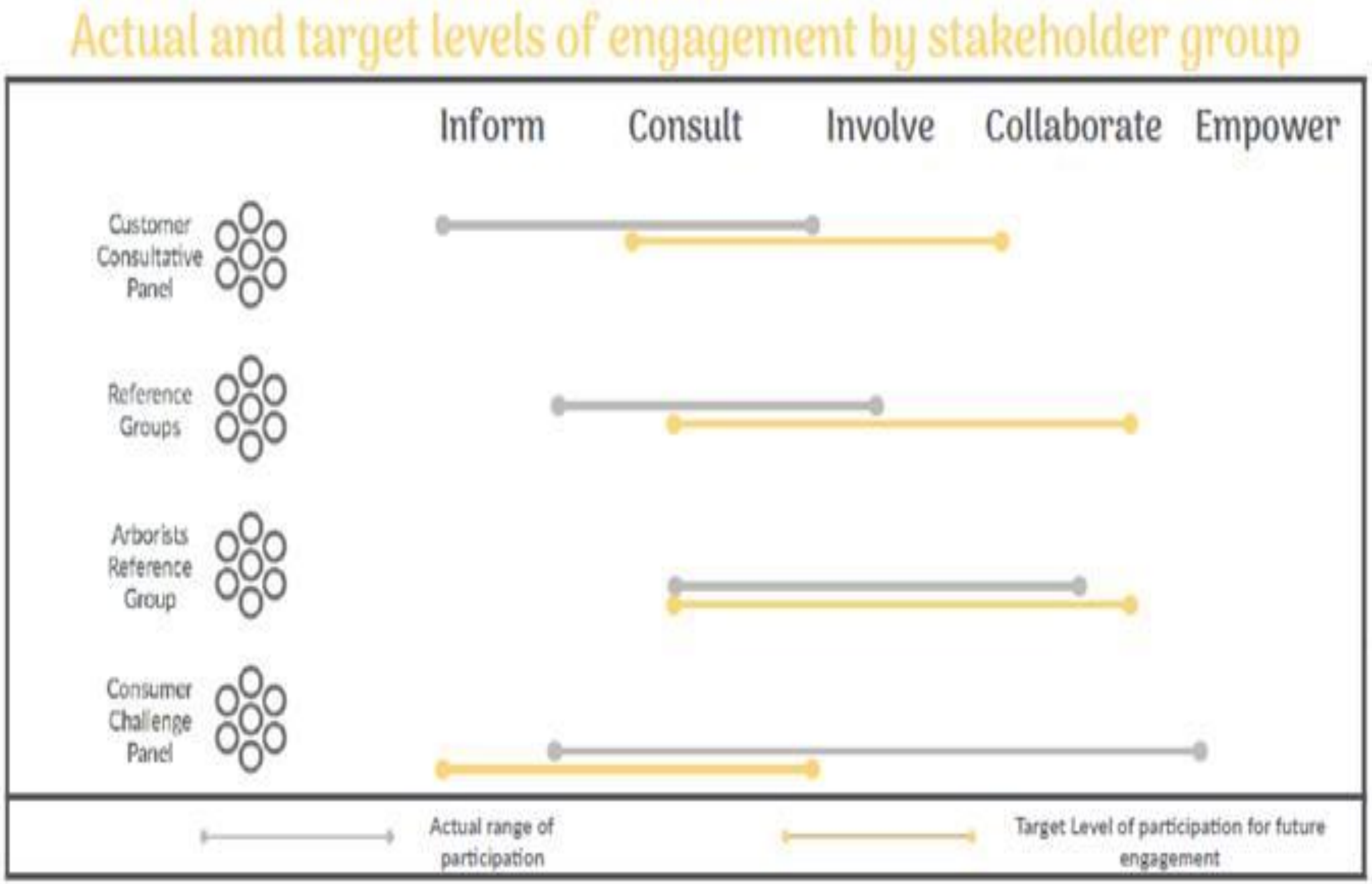
Engagement since the Draft Plan – a missed opportunity



But it could have been more meaningful......

SAPN CCP offered to narrow the gap between the Draft Plan and the Revenue Proposal

Engagement and continuous improvement



- Welcome review of engagement program by Think Human
- Agree with Think Human that SAPN should rely more on SAPN CCP
- Agree there should be guardrails around engagement program to maximise customer influence

Next steps

CCP focus between now and the Draft Decision

- Limited funds mean we will have little scope to undertake detailed analysis prior to Draft Decision
  - Focus on the changes resulting from the tax allowance decision
- Look forward to the AER's Draft Decision as a trigger for more detailed engagement in 2019/20 assuming budget is available
- However given the very limited change from the Draft Plan, many of our comments on the Draft Plan remain