Consumer
Challenge
Panel

Comments on the Jemena Draft Regulatory Proposal (Draft Plan)

as part of the Victorian Electricity Distribution Businesses 2021-2025 Regulatory Reset

Consumer Challenge Panel Sub-Panel CCP17

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30 July 2019

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Acknowledgements

CCP17 wishes to acknowledge the cooperation and support of Jemena and AER staff for generously providing information and insights to assist the sub-panel in its review of the business's Draft Plan.

We advise that to the best of our knowledge this report neither presents any confidential information nor relies on confidential information for any comments.

1 Introduction and context

The five Victorian Electricity Distribution businesses (AusNet Services, Jemena, CitiPower, Powercor and United Energy) have commenced preparation of their regulatory revenue proposals for the 2021 to 2025 Regulatory Control Period. Currently, the businesses' regulatory proposals are due to be lodged with the Australian Energy Regulator (AER) by 31 July 2019, although this may change based on information emerging from the Victorian Government. In common with current practice for the majority of regulated network businesses operating in the National Energy Market, each of the businesses has embarked on an early engagement programme with its customers in order that customer needs are well understood by the business.

Consistent with practices in other jurisdictions, the Distribution Businesses (DBs) have produced initial outlines of their regulatory proposals *('Draft Plans')* following completion of the majority of the consumer engagement associated with their resets.

CCP17 commends the Victorian DBs for this early engagement approach, and we are very supportive of the way they have made these Draft Plans available to Victorian energy consumers and other stakeholders. In responding to the Draft Plans, this document considers the information presented with the intention of:

- considering the linkages between the observed consumer engagement and the issues raised in the Draft Plans;
- identifying common themes that have been prevalent in the regulatory proposals in other jurisdictions, and shining a light on how these Draft Plans address those common issues;
- providing feedback to the DBs on matters of importance to consumers generally, including revenue trends, focus areas for expenditure, and trends in efficiency;
- highlighting the areas where further consultation may be warranted leading up to lodgement of the Regulatory Proposal; and
- identifying any areas of importance to customers that may not yet be evident in the Draft Plan.

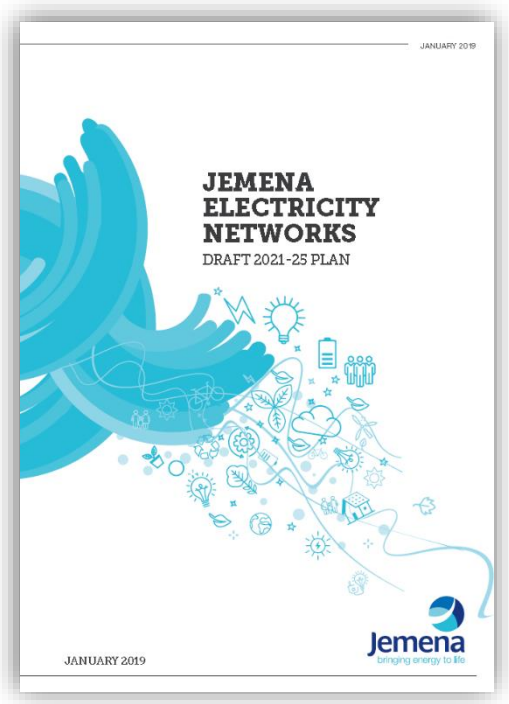
We present this report with the intended audience of:

a) the AER, to provide an early indication of how closely the Draft Plans reflect the outcomes of the early engagement programs;
b) the DBs themselves, to assist in engagement leading to the submission of the Regulatory Proposal; and
c) Informed customers and stakeholders who are taking an interest in, or actively participating in, this regulatory process.

Key to the success of the engagement is that the Draft Plans are seen not as a summary of the eventual Regulatory Proposal, but as a lightning rod for conversation, comment and feedback. Critical is the way the DBs seek and consider any feedback from stakeholders, and listen to the sentiment, questions and emotion presented in the responses to the Draft Plan.

Over the next few months, CCP17 will keenly watch the way the DBs consider the feedback from the range of stakeholders, interact with their Customer Consultative Panels and Reference Groups, and take this excellent opportunity to best reflect the needs, thinking and suggestions from the community.

2 Overall Assessment of Jemena's Draft Plan



The Jemena Electricity Networks Draft Plan for 2021-25 is a well-crafted, clear and readable document that has been targeted for interested customers as the primary audience. CCP17 agrees with this focus.

The six-page initial summary, including a one-page infographic, is very well presented and commences very strongly with clear statements of commitment from both the Chair of the Board and the Managing Director, a commitment to gaining and responding to consumer preferences is palpable from the opening sentences of both statements.

The summary provides clear information about Jemena's regulatory proposal intent and the key questions on which feedback is sought.

The balance of the Plan systematically takes the reader through the various elements of the traditional building block approach so that the structure is consistent with what time-poor, consumer advocates would reasonably expect, making responding to the plan relatively straightforward. All the graphics are relevant and provide useful information while also helping to make the report more readable, from a layout and visual aesthetics perspective. We suggest that in seeking readability, Jemena has underutilised data provision. While the data presented is useful, a better breakdown of key components of capex and opex expenditures would have been helpful, particularly with comparative data over time and comparison of actual expenditures with regulated allowances. Clear and comparable data helps to build a better understanding in the reader's mind about past performance, which is helpful in building trust so that the reader can reasonably expect that the plan for the future is well based.

We commend Jemena for producing a clear, informative and well written Draft Plan and for the engagement that has accompanied the Draft Plan's development and release.

3 Common trends in the Victorian DBs' Draft Plans

This section presents some general comments that apply to all of the Draft Plans, albeit in varying degrees.

Consumer engagement

Each of the Victorian DBs commenced its consumer engagement for this regulatory period early – about two years before the initial lodgement date, which has meant that there has been considerable opportunity to think through the issues, to engage with a diverse range of consumer interests, and to trial some new models.

AusNet Services is trialling a Customer Forum methodology as part of the NewReg project. We recognise that there are separate evaluation processes associated with NewReg, and so do not comment to any extent on the methodology and outcomes of this approach, however we acknowledge that it is an important trial and a new methodology for energy network businesses in Australia. CCP17 is also well aware that the other four businesses have also trialled new methods for their engagement, including a "Scenario Planning" approach from CitiPower, Powercor and United Energy, and a "People's Panel" from Jemena.

Suffice at this stage for us to observe that there is considerable merit in each of these trials. These new methodologies are not the only approaches to consumer engagement that have been implemented by the five businesses. The range of engagement approaches applied has been significant for each business in its ability to glean a range of consumer perspectives.

CCP17 has prepared a separate 'Progress Report on Consumer Engagement by the Victorian Electricity Distribution Businesses'[1] spanning the period up to publication of the Draft Plans. The report provides details about our observations of the consumer engagement by each of the five businesses, in the context of the Draft Plans. We recognise that the consumer engagement has been of a high standard and we opine that the businesses have made concerted efforts to apply what they have heard from consumers to their Draft Plans. A recurring question has been the role of network business Customer Consultative Panels and Reference Groups, particularly given the various innovative strategies that have been applied. Our opinion is that ongoing Customer Consultative Panels and Reference Groups are a useful component of embedding consumer engagement as 'business as usual' for network businesses.

Network efficiency

There has been quite a deal of attention given in energy market commentary in Australia to the relative inefficiencies of network businesses and specifically in the 2018 ACCC report: "Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry—Final Report."[2]

"Network costs are, on average, the largest part of the average NEM customer bill and have also been the largest factor in the increase in bills over the last 10 years."

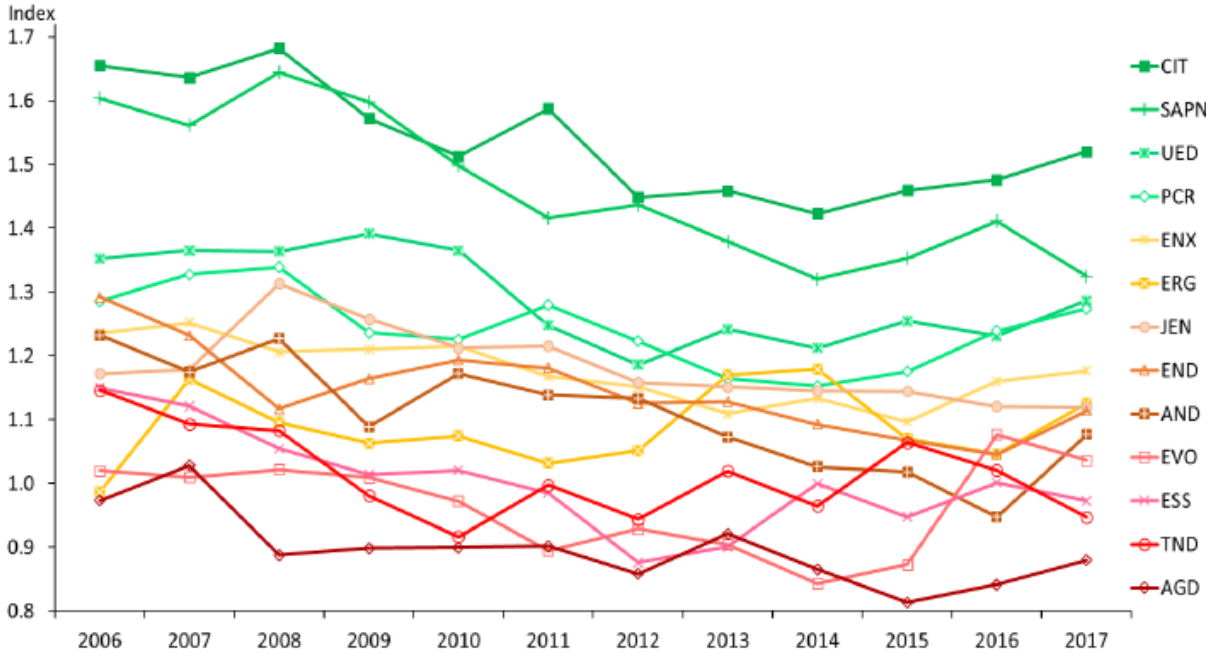
" … the ACCC notes that the AER's most recent economic benchmarking analysis shows that the relative efficiency of electricity networks has decreased overall over time (although there was a slight increase in distributor efficiency in 2016). Arguably, this suggests that customers were getting decreasing value for money from networks over the same period that the significant investment was taking place."

[1] https://www.aer.gov.au/system/files/CCP17%20Progress%20Report%20on%20Vic%20DB%20Consumer%20Engagement%20-%20Final%20-%2027%20March%202019.pdf

[2] https://www.accc.gov.au/system/files/Retail%20Electricity%20Pricing%20Inquiry%E2%80%94Final%20Report%20June%202018_0.pdf

It is clear that Victorian DBs have all been among the most efficient in the country for some time, which was recognised by the ACCC and is shown in the following graph from the AER's benchmarking report, 2018.[3] Using multilateral total factor productivity as the measure for network efficiency, three of the four most efficient network businesses were identified as the Victorian DBs CIT (CitiPower), UED (United Energy) and PCR (Powercor). Jemena, which is rated at 7th and AusNet Services at 9th are in the 'middle of the distribution' of Australian electricity distribution companies.

Figure 1: Multilateral total factor productivity by individual DNSP, 2006–17



CCP17 accepts that a starting point for consideration of DB Regulatory Proposals for 2021-25 in Victoria is that network businesses are efficient, or comparatively efficient. However, this does not mean that there is no room for improvements in efficiency over time. Efficiency is not a static condition; it is something for which ongoing effort is required.

Victorian Government requirements

There are some common trends across all Victorian DBs which have their roots in the design and equipment standards from the State Electricity Commission of Victoria (SECV), as well at the common requirements set by Energy Safe Victoria (ESV) and the Victorian Essential Services Commission (ESCV).

These trends appear to be:

1. Victorian DBs have a responsibility to comply with the findings of the 2009 Victorian Bushfires Royal Commission that placed requirements on network businesses for bushfire risk mitigation. The significant focus on investment in safety matters and bushfire mitigation continues, not only through the Rapid Earth Fault Current Limiting (REFCL) installation and maintenance programme, but also in the mandated requirements for overhead asset inspection and replacement of poles and overhead conductors. This issue is most evident in AusNet Services and Powercor with significant exposure to bushfire-prone areas, but is a responsibility for all, nonetheless.

[3] https://www.aer.gov.au/system/files/AER%202018%20distribution%20network%20service%20provider%20benchmarking%20report%20_0.pdf

2. An increase in activity for the replacement of aged equipment, particularly power transformers and outdoor 66kV and 22kV switchgear, is emerging as a large amount of this equipment approaches the end of its service life. Replacement capital continues to grow as the most significant area of network investment, placing significant pressure on the DBs to demonstrate efficiency and innovative risk management to try to mitigate asset growth against a background of moderate demand growth and uncertainty as to future network requirements.
3. The development of new network capacity is required in fast-growing new residential areas on the Melbourne urban fringe.
4. A key issue for all Victorian DBs for the coming regulatory period relates to the installation of small-scale photovoltaic (PV) systems on household and small-business rooftops. A 6-kW system can now be installed for about $2500 in Victoria due to a Government subsidy, making them affordable for many households and small businesses. The Government-sponsored programmes are raising the profile of the performance and capacity of low voltage networks. DBs are all considering increased investment in their low voltage networks, particularly in the form of low voltage monitoring, under the banner of 'future networks', 'future grid', 'smart grid' or 'open networks'. The CCP first highlighted the importance of a balanced and considered approach to this investment in the report to the AER regarding the proposed investment by SAPN.[4] We commend this report to Victorian DBs in preparing the Distributed Energy Resources (DER) investment aspect of their regulatory proposals. At the same time Victorian DBs have had the opportunity to observe the experiences of network businesses in Queensland and South Australia where solar penetration is already at much higher levels. Victorian DBs also have the advantage of several years of smart meter data and the capacity to utilise this data on an ongoing basis to significantly assist with network design in response to increases in solar PV penetration. So while we recognise that a significant focus on DER and in particular installation of solar energy is an important aspect of work for the network businesses over the next regulatory period, there should not be any surprises for the Victorian DBs due to the rising solar PV penetration, and so there should be no need for significant extra spending for network hardening or network capacity to deal with the growth in DER, including small scale solar installation.

   The advent of virtual power plants (VPPs) is of concern to DBs since they create the potential for significant surges in supply as the pool price increases. There is no contractual relationship between VPPs and distribution businesses so there is rightfully some concern among energy network businesses about the way that VPPs could behave. However, this is an issue that can be resolved by proactive discussion rather than by substantial extra network capacity expenditure.

These trends are apparent in all the Draft Plans.

Information and Communications Technology (ICT)

The CCP has indicated concern on several occasions about the apparent escalating costs of ICT across energy network regulatory proposals Australia wide. The issue is relevant to the Victorian DBs where CCP17 will be carefully considering the ICT proposals from network businesses, expecting to see efficiencies from such expenditure and expecting that savings can be identified and passed through to consumers. There are many aspects of ICT, from network management through to national cybersecurity issues, and consumer information technologies and other ICT applications. All ICT investments should be efficient and effective and benefit consumers.

[4] https://www.aer.gov.au/system/files/CCP%20subpanel%2014%20-%20Advice%20-%20Response%20to%20SAPN%27s%20approach%20to%20the%20challenges%20of%20the%20high%20penetration%20of%20embedded%20generation%20-%20June%202018.pdf

Five-minute settlement

An AEMC-supported rule change means that settlement of electricity markets in Australia will move from 30 minute to 5-minute settlement over the next Victorian regulatory period, applying from 2021, and this will have cost implications. At this stage we do not expect to see substantial cost increases in order to comply with five-minute settlement, which can be implemented over a 3½ year period, from announcement in November 2017.

Collaboration on tariffs

The Victorian DBs have collaborated effectively, particularly regarding tariffs, which continue to be of concern to customers. Consumers across the state expect to see consistent approaches taken with tariff setting and so we commend the businesses for meeting with each other and with consumer interests to seek a shared approach to tariff design.

Energy Charter

On 31 January 2019, the development of and commitment to an Energy Charter was announced by the CEOs of several energy businesses: generators and retailers as well as network businesses. The implementation of the Energy Charter has the potential to assist consumers through network businesses and retailers collaborating more effectively in the interests of consumers. Victoria is ideally placed for early implementation of the intent of the Energy Charter.

Draft Plan presentation

There are a couple of brief comments we wish to make about the actual presentation of the Draft Plans, which are intended to be helpful for the presentation of future Draft Plans:

1. While the narrative of Draft Plans is critically important, key data is also important. We suggest that a couple of pages of data, probably as an Appendix, would be particularly helpful. At a minimum, data would show, for broad aspects of capital cost, operating cost and connections, allowance for the current regulatory period, actual and predicted spending for the current regulatory period and amount proposed for the next regulatory period. Regulated Asset Base (RAB) growth is also of significant interest, as are a range of ratios such as RAB per customer, opex per customer, cost per connection etc.
   It would also be very helpful to see the price paths presented in a common format across all five businesses, for example percentage change from a base year, nominal terms, for each of the five years of the regulatory period.
2. A print friendly version of the Draft Plan will also be very helpful particularly for groups representing consumer interests who want to be able to download and print a copy of the Draft Plan without all the photos and colour associated with an externally printed copy.

4 Consumer engagement

CCP17 considers that the most telling indication of the Jemena approach to consumer engagement is found on page 1 of the Draft Plan.

The very first paragraph of the Draft Plan is part of the message from the Board, presented by Ruan Qiantu, Chairman of the Board. His opening paragraph states:

"Last August, I was honoured to witness 43 diverse Jemena household customers come together to deliberate on a range of complex topics, to help us shape the services we provide to our customers. It is clear that households not only expect a safe and reliable electricity supply. They also want us to be fair, transparent and accountable in our decision-making."

In parallel to the message from the Board, also on page 1, is a message from Managing Director, Frank Tudor, whose opening two paragraphs are:

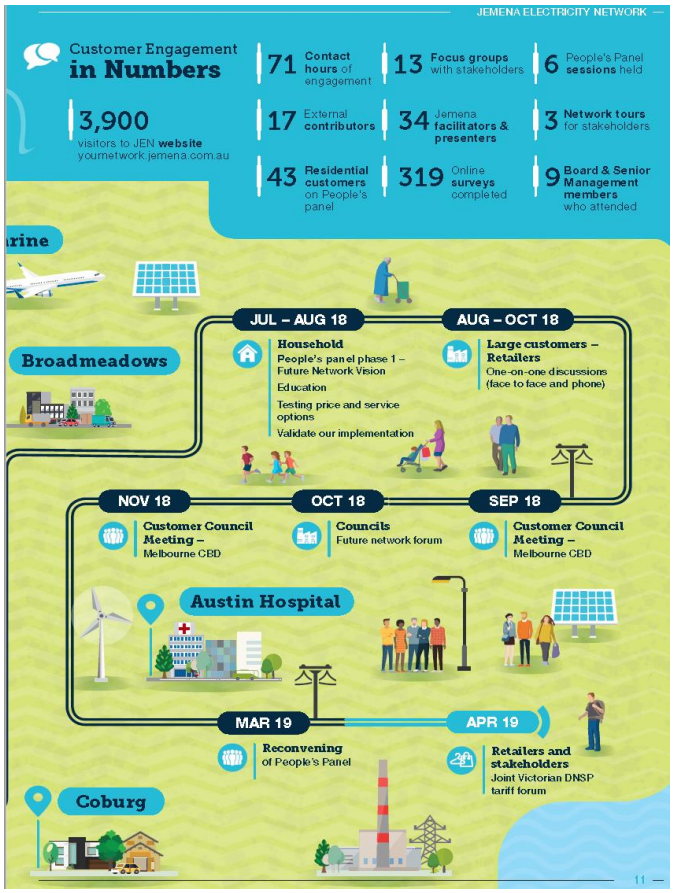
"We have listened to our customers and heard about the difficulties many of them are facing in making ends meet. Not only have electricity bills been rising, so has the cost of living in the cost of doing business.

We have also understood that many of our customers want a smarter, more efficient future grid that enables the community to share renewable electricity."

The significance of these two statements is that engaging with customers is identified as the very first statement from both the Chairman of the Board and the Managing Director – this is genuine engagement and reflects a deep embedding of consumer perspective at the most senior levels of the organisation's management.

Jemena also provides a summary of its "customer engagement journey" in the Draft Plan (copied below as Figure 2). The summary highlights an extensive range of processes to engage with the diversity of Jemena customers. The graphic also reflects the extended time period over which engagement has occurred, indicating to us that engagement is increasingly a business-as-usual activity for Jemena, an attitude which is central to effective consumer engagement and customer responsiveness.

Figure 2: Jemena's customer engagement journey



4.1 People's Panel

A noteworthy component of Jemena's consumer engagement was the establishment of a People's Panel, a group of 43 people who were carefully appointed to reflect the demographics of Jemena's customers. The panel met over six sessions, providing an in-depth perspective on a range of pertinent issues that were presented to them and advice about priorities for Jemena.

The final session of the People's Panel culminated in a series of recommendations being handed to the Board by the People's Panel. CCP17 was very pleased to be able to observe the People's Panel sessions and share the view that this is a particularly valuable approach to engagement that has given Jemena some excellent insights.

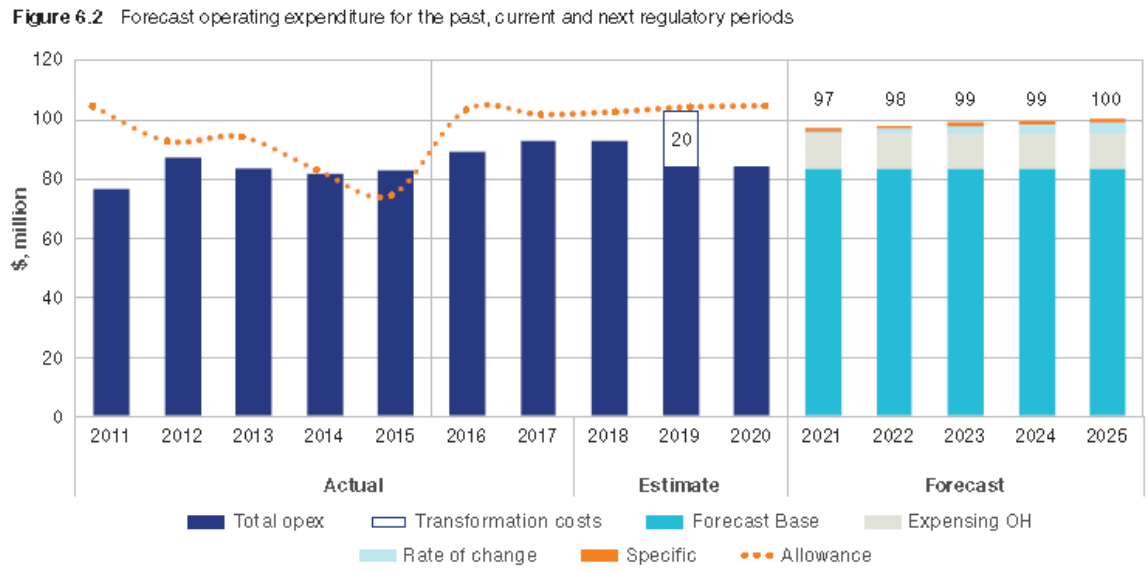
5 Operating expenditure

Overview

The Jemena forecast for operating expenditure is for a reduction compared to the regulated allowance for the current period, 2016-20 with a commitment to a 1% operating cost productivity dividend for consumers each year.

Figure 3 below presents Jemena's operating cost summary in the Draft Plan.

Figure 3: Jemena operating expenditure (source Jemena Draft Plan)



Transformation costs

Of significance in the current regulatory period is a $20 million increase in operating costs in the 2019 year described as "transformation costs" that will reduce operating costs for each year of the next regulatory period. The transformation costs have focused on reducing staff costs and investing in systems that lead to more efficient operations. Jemena states that the transformation costs of $20 million will provide savings of the order of $46 million over the 2021-25 regulatory period.

Efficient base year

Jemena is proposing that 2019 operating costs, less transformation costs, be established as the efficient base year for projecting future operating costs.

CCP17 is supportive of this proposal since Jemena is one of the more efficient network businesses across Australia, and the 2019 expenditure for operating costs was lower than operating expenditure cost for most years of the current regulatory period, evidence of the relative efficiency of 2019 as a base year.

Benchmarking

As indicated above, Victorian network businesses generally rate as among the most efficient electricity network businesses in Australia, using various efficiency benchmarking techniques. Considering multilateral total factor productivity (see Figure 1 above), Jemena is the median distribution business in Australia, suggesting that there is room for improvement when compared to its best performing peers. The capital expenditure partial factor productivity is among the better performing network businesses in Australia, while opex partial factor productivity is poorer by comparison. It is anticipated that the

transformation initiative of 2019 will help Jemena to move to also being one of the better performing operating costs businesses in Australia.

Operating costs 2021-25

There are a couple of aspects of the 2021-25 expenditure proposals that make comparison with previous years somewhat nuanced. These aspects include the treatment of corporate overheads and in particular IT costs. IT costs are the subject of separate AER consideration, so we will reserve our opinions relating to these costs until the AER process is more advanced. Suffice to say that, as with other network businesses, Jemena is confronted with the need to expense significant IT costs over relatively short periods of time, compared to past depreciation arrangements. This reflects the ever more ubiquitous nature of IT and the shorter lives of many software applications.

CCP17 expects to see benefits for consumers in IT expenditure being spelled out as clearly as possible, while recognising that there are increasing demands on network businesses to spend money on cybersecurity and related mandated IT costs.

Labour costs are forecast to grow by 1.3% (real assumed) which is reasonable for an industry that has been prone to labour rate increases significantly above those experienced by the general population.

Another of the "somewhat nuanced" operating cost expenditures is the treatment of metering costs, with some metering costs being reclassified as network services. This has occurred in the current regulatory period resulting in apparently falling metering costs and rising network service costs. We have not closely considered the relative movements of these prices, but are of the view that, in aggregate, the status quo remains in relation to the costs that customers pay.

CCP17 observes that Jemena's operating costs are being carefully managed with a 1% annual productivity improvement expected, so the operating costs indicated through the Draft Plan appear reasonable for customers. However, there are likely external factors, particularly responding to the Victorian Bushfires Royal Commission and increasing cybersecurity requirements, which may lead to higher operating costs in the final Regulatory Proposal. We have high expectations that any significant changes will be the subject of further consumer engagement, and any increases in expenditure will need to be generally accepted by consumer interests.

6 Capital expenditure

6.1 Key issues for capex

The Victorian electricity industry was not subject to the aggressive change to network reliability standards seen in Queensland and New South Wales earlier in the 2000s. Similarly, the recent REFCL programme is also somewhat unique to the Victorian regional electricity distributors. Jemena is, to a large extent, only minimally affected by this bushfire safety programme.

The trend for capital expenditure for Jemena over the last decade as shown in Figure 4 is largely consistent in a macro sense with the influences on investment in energy infrastructure being seen across the nation, including a general reduction in capex investment in the upcoming regulatory period due to stabilising energy demand and influences that subdue overall peak demand growth, despite a general reduction in load factor due to embedded generation and changing customer attitudes to energy.

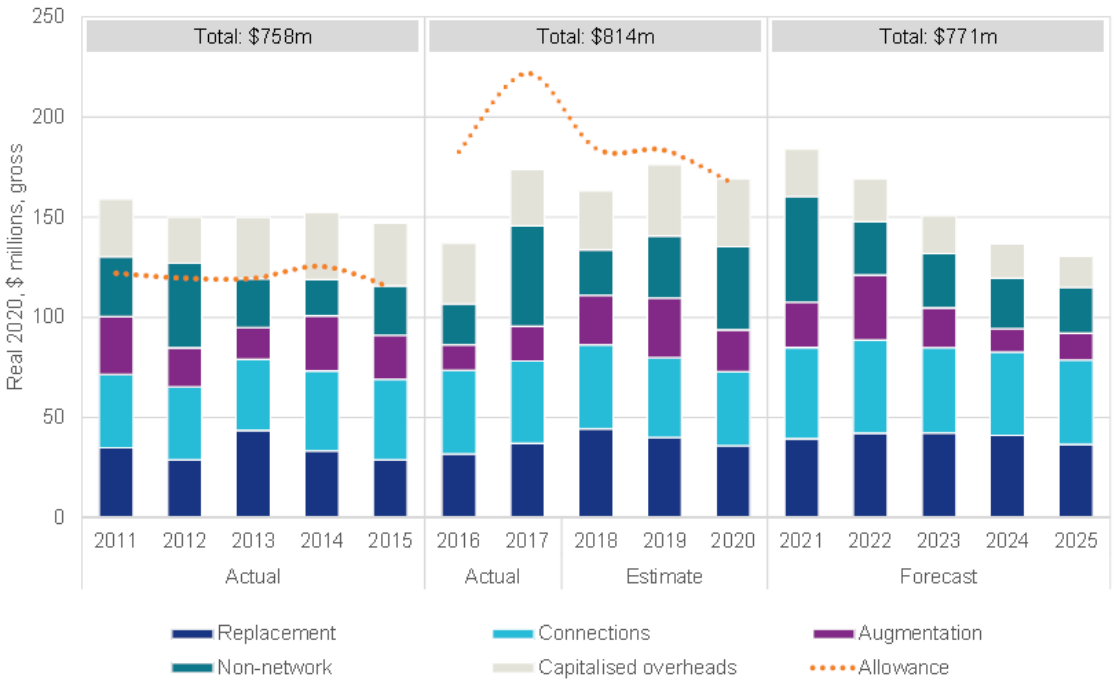
Customers expect utilities to moderate capital investment in networks, seeking new and efficient ways to 'do more with less' in network terms, and to be very sympathetic to the price risk inherent in growing the value of the Regulated Asset Base (RAB).

Jemena has noted in its Draft Plan a proposed capital expenditure of $771 million in the 2021-25 period, as shown below. This is a reduction of around 5% from the planned capital expenditure in this current period, although the underlying investment in asset replacement is increasing by 7%.

Two issues inherent in the trend require clarification.

First, any underspend in the current period requires a clear explanation as to how this occurred, what influences prevailed, and whether that underspend can be considered due to efficient business operation by Jemena. Second, the increase in planned expenditure in the first year of the new period requires strong justification.

Figure 4: Jemena – proposed capital investment (Source: Jemena presentation March 2019)

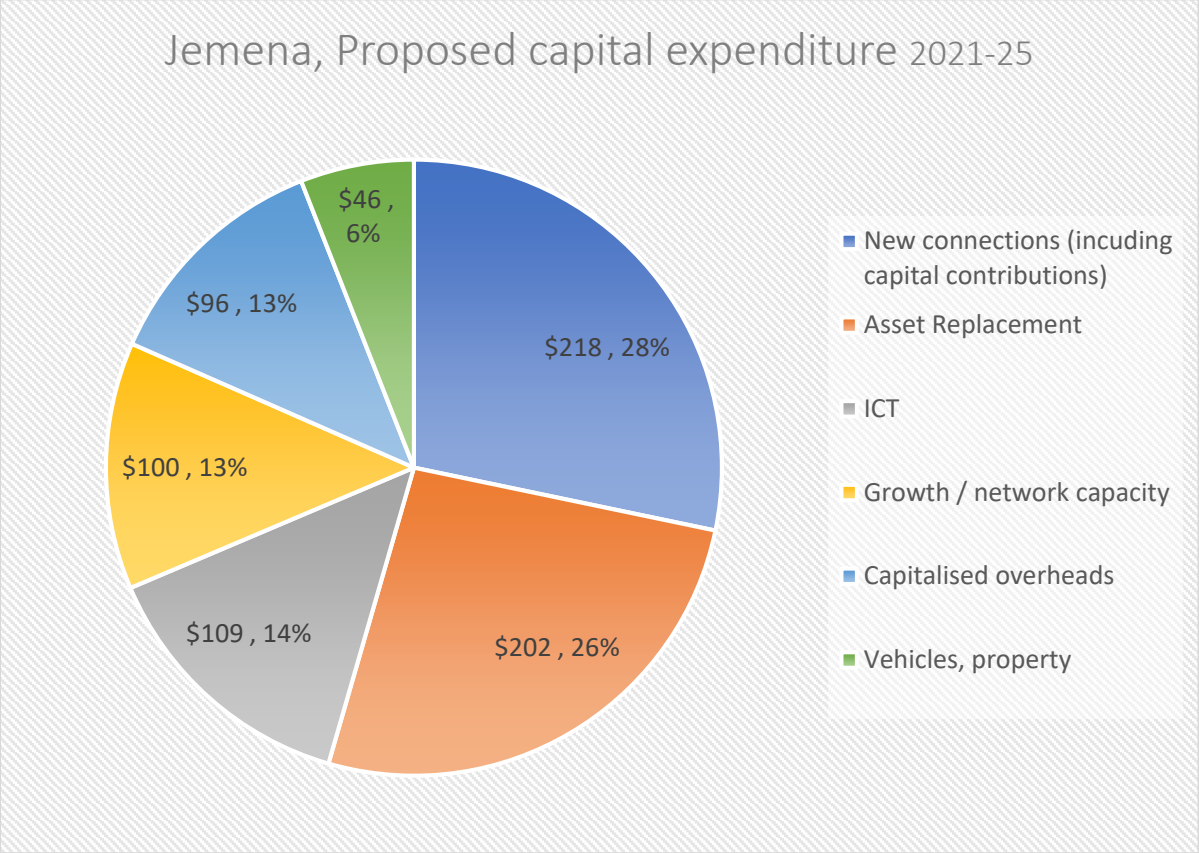


Jemena has gone to some lengths to explain its capital expenditure plans in the Draft Plan and in the workshop of early March 2019.

- $109 million investment in ICT capability;
- $46 million investment in property and fleet, roughly the same as the current investment level; and
- $96 million of capitalised overheads.

The proposed capital expenditure for 2021-25 is shown below in Figure 5.

Figure 5: Jemena proposed CAPEX 2021-25 (Source: CCP17 analysis of Jemena data)



6.2 Consumer engagement on capital investment

In its consumer engagement, including with its Customer Council, Jemena has followed a theme of 'five megatrends' that will impact the role of the distribution network. This is a useful approach that will, among other things, assist in focusing customers' thinking in the area of capital investment. The area of network hosting capacity for embedded generation is an area that is challenging the thinking of almost all DBs, and Jemena has raised it and the broader discussion on sustainability as a specific matter in its engagement. This is a useful approach.

Jemena has taken a fairly general and conversational approach about the reliability impacts and any trade-offs that may exist when determining an optimum asset replacement strategy. We note the desire to defer expenditure where possible. Jemena has gone to some lengths to explain its capital expenditure plans in the Draft Plan and workshop with selected stakeholders in early March 2019.

6.3 Network performance

Jemena has, like all utilities, experienced an improvement in network performance when measured by the overall and average performance indicators. A continually improving network performance, with average unplanned interruption duration now below target at 41 minutes, is commendable.

We attribute this to better technology, improved asset management and efficient outage management processes.

Given this improvement, Jemena has not noted any specific capital investment towards network performance improvement beyond that inherent in existing plans. CCP17 supports that position.

6.4 Proposed investment – network growth

Connections

From the data provided in the Draft Plan, Jemena is expecting continued moderate customer growth of 1.6% p.a., driven largely by new residential subdivisions on the urban fringe. This is consistent with other utilities and supporting information. This appears to be a slight slowing of the new connection rate when compared with recent connection activity.

Jemena notes however that connections capital expenditure will increase to $218m, up 19% on the existing period, driven largely by an expected 37,000 new customers connecting over the 5-year regulatory period. An important guide to operational efficiency is the cost per new connection. This apparently inconsistent increase in expenditure given fairly stable customer growth will require detailed clarification by Jemena.

Figure 6: Connections Capital Expenditure by Jemena (source: Jemena figure 5.9)

There has also been some mention of a proposed, albeit minor, change to the connections policy that applies to all Victorian DBs. If this is the case, we commend the work done by Endeavour Energy in Victoria where, in conjunction with CCP10, it was highlighted that any change to connections policy should:

a) demonstrate a tendency towards 'causer-pays'; and

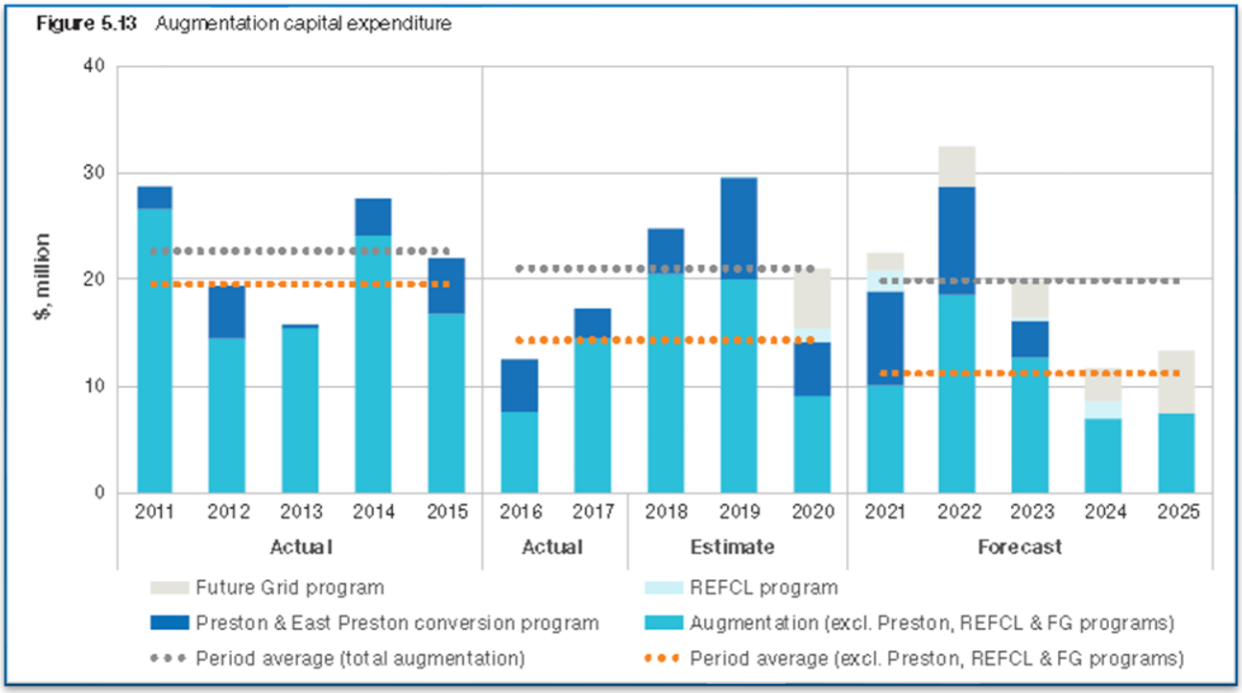
b) include robust engagement with consumers, in particular the company's Customer Committee, to clearly explain the reasons for the change and the implications on all customers.

Network augmentation

Jemena proposes expenditure of $100m on network augmentation, incorporating a steady but low growth in peak demand of just under 1% per annum. This is 5.2% less than the investment in the current period, and includes an amount for the retirement of the aged inner-city 6.6kV network in Preston and East Preston. Jemena has focused on making the case for this conversion in its engagement, and it appears to have attained a level of support from that engagement. On the basis of the information provided to customers, CCP17 is largely supportive of the proposal, subject to detailed analysis by the AER.

Jemena has also made an allowance for its future grid programme. This matter was presented in some detail to the workshop of consumer representatives in early March 2019.

Figure 7: Jemena – trend in network augmentation expenditure (Source: Jemena)



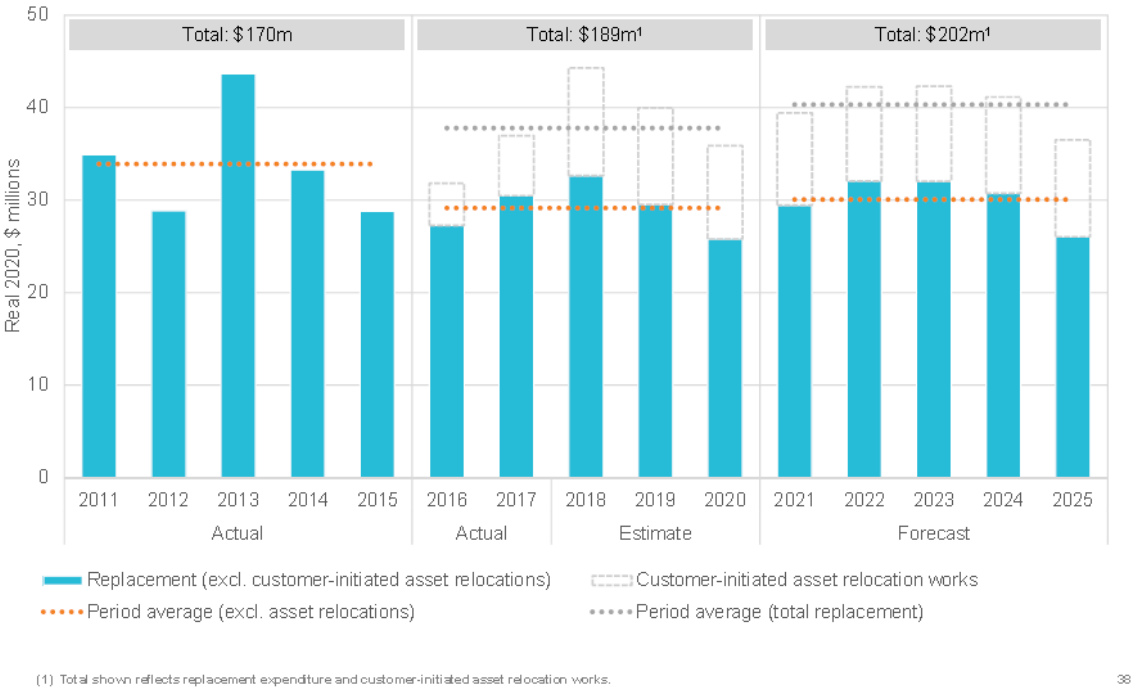
6.5 Proposed investment – repex

Jemena has nominated an amount of $202M for asset replacement, noting that this amount includes an allowance for customer-initiated asset replacement works. The amount for actual asset replacement, net of relocations, is $150M, being a 7% increase in the planned expenditure for this period.

This increase in repex expenditure reflects a trend that is common across most of the Victorian DBs. Jemena notes that the majority of the required expenditure in the next period, other than issues created by third parties, relates to the poles and pole top structures, replacement of conductors and service lines. This profile is quite different to that of the regional Victorian DBs, where bushfire mitigation works predominate. When the Regulatory Proposal is lodged, we expect that Jemena will provide justification for this expenditure through robust asset management and risk management plans.

CCP17 continues to encourage Jemena to maintain a frequent and effective relationship with the AER to optimise its position regarding the AER modelling on replacement capital.

Figure 8: Jemena – trends in asset replacement expenditure (Source: Jemena)



AER Application note for asset replacement

In its presentation to the Customer Forum of 7 June 2018, Jemena outlined its approach to asset replacement. This approach validly considers options such as like-for-like replacement, reduced capacity equipment, deferral and non-network solutions. CCP17 commends Jemena to the recently-released AER *Application Note for Asset Replacement*, which outlines a robust process for determining the risk of loss of amenity that an asset failure may create, with a separate consideration of the options to reinstate that amenity. We acknowledge that Jemena is well-advanced in its asset replacement planning, however any recognition of that Application Note will greatly support Jemena's proposal. In particular, issues such as 'base case' planning, counterfactuals and further development in the risk assessment of failure would assist.

The trend in repex expenditure is provided by Jemena in its Figure 7.10, reproduced as Figure 8 above. Jemena notes that the majority of the required expenditure in the next period relates to the replacement of conductors, cables and switches. When the regulatory proposal is lodged, we expect that Jemena will provide justification for this expenditure through robust asset management and risk management plans.

Jemena notes that the increase in the proposed expenditure in the next period relates in part to changed bushfire regulations. We understand that no key regulatory changes have occurred. However, new programs in high bushfire risk areas are a driver of expenditure.

6.6 Investment in Future Grid programmes

Jemena is not alone in considering the challenge of increasing DER and how to make a reasonable allowance for the likely impact of new customer technologies. CCP17 reinforces principles related to the 'least regrets' approach being taken by Jemena and other DBs:

a) Maintain a view of the long-term interests of all consumers.

b) Consider the customer value to all customers, not just those who participate in DER.

c) Take a staged approach, implementing the investment not in a single step, but a series of steps. Deployment should target those networks and network segments where the customer value is greatest (i.e. highest PV and storage penetration).

d) Pursue common platforms, standards and protocols.

e) Focus on framework and policy optimisation, through connection standards, Australian Standards, tariff reform and demand management.

f) Make use of technical facilities that are already available, such as those inherent in the connection systems and inverters. This is not necessarily a permanent solution, but may represent a cost-effective deferral option.

g) Improved (cost reflective) tariffs may be effective for a period of time in reducing the risk of storage devices being used in a way that puts the network outside its operating envelope.

CCP17 is very interested, as are many stakeholders, in the approach to justifying investment – funded by all customers – in enhancement of the network to facilitate increased DER. Customer surveys, in particular around how the concept of 'export constraint' is presented, are very important. We trust that this issue will be considered in the lead up to the submission of the Regulatory Proposal.

7 Information and Communications Technology (ICT)

Customer expectations

Overall, ICT investment by utilities is growing rapidly as the role of corporate support systems, real-time control systems, data gathering, and data analysis plays a much greater role in network businesses. Data analytics, low voltage network operation, regulatory commitments and cybersecurity obligations are all placing upward pressure on ICT requirements.

Utilities need to be held accountable for these significant investments in ICT, with clear discussion and validation of the benefits these investments deliver for the organisation and ultimately for customers.

Consumers need to be well-informed of the requirements, benefit, prudency and risk implications of investment in ICT and related assets, as they gain an increasing influence on business performance and efficiency (and hence operating cost), depreciation (again, influencing price to customers), data risk, service delivery, customer choice and network supply risk and performance.

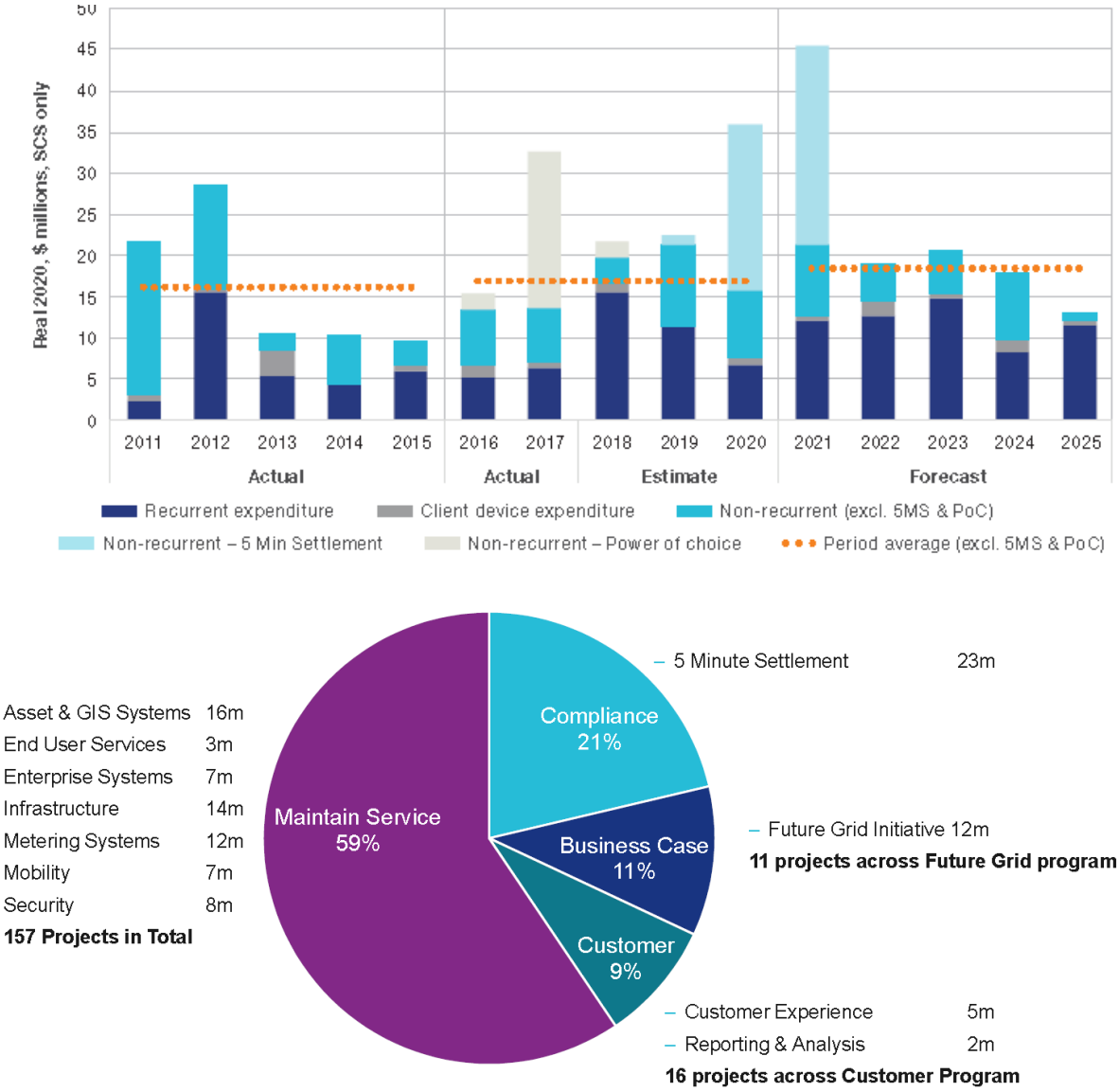
Jemena proposal

Jemena has taken a useful and somewhat theoretical approach to placing context around its planned ICT expenditure. In addition, Jemena has highlighted the synergies that exist in taking a view of ICT investment across the entire Jemena group – a discussion that is seen as having a focus on efficiency. Jemena has mentioned the role of ICT in organisational productivity, which is the start of a broader conversation regarding the purpose of ICT investment and the efficiencies it (must) deliver, noting:

> *"ICT is the key determinant of delivering opex productivity"*

Figure 9 below shows the increased ICT investment requirement by trend and business function.

Figure 9: Jemena - capital investment in ICT by function (Source: Jemena presentation March 2019)



CCP17 highlights that ICT expenditure will be a significant component of the analysis regarding the value of the investment to consumers as part of the Regulatory Proposal process. In doing so, matters such as the following will be considered:

- Has the allowance from the current period been invested?
- What are the productivity benefits that have arisen from that investment?
- Have the risks of delaying the investment been meaningfully considered?
- Can the synergies of a common IT platform across multiple companies be demonstrated?

8 Metering

With the use of smart meters, Jemena, as with the other Victorian DBs, should be in a position to understand the operation and performance of its low voltage network well, and this knowledge should be reflected in elegant planning and investment decisions.

9 Tariffs and pricing proposals

CCP17 understands that the Victorian DBs are collaborating on the introduction of cost-reflective tariffs for residential and small business customers. However we are not aware of the tariff structures that will be proposed for the 2021-25 Tariff Structure Statement.