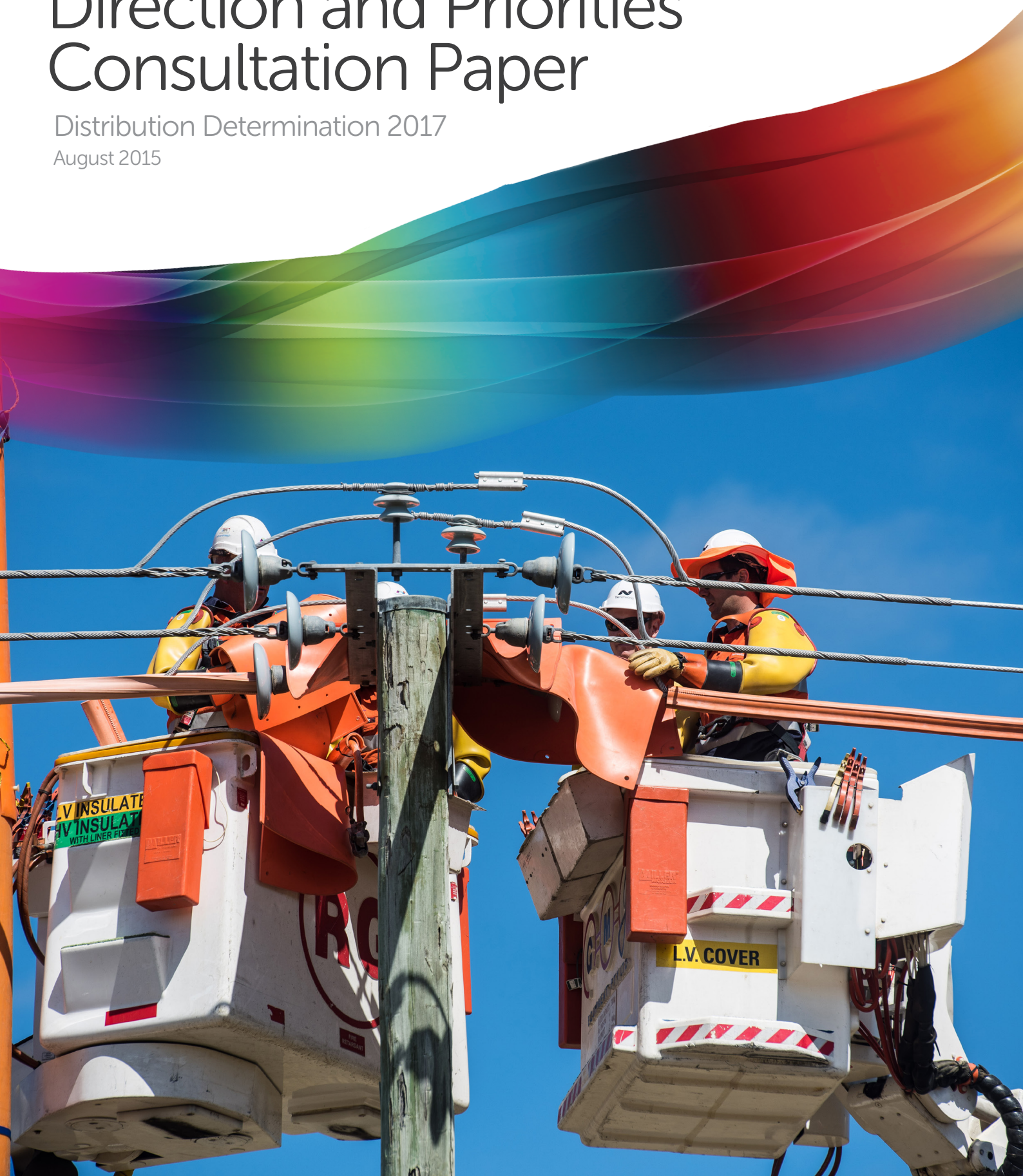
TasNetworks
Delivering your power

Direction and Priorities Consultation Paper

Distribution Determination 2017

August 2015



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Message from the CEO

Created on 1 July 2014, TasNetworks is on a journey of transformation to deliver the lowest sustainable network prices to our customers, while achieving appropriate returns for our shareholders.

With network costs making up about 60 per cent of the average Tasmanian electricity bill, we have a key role to play in ensuring we keep customer prices low, whilst delivering safe and reliable services.

Our vision is to be "trusted by our customers to deliver today and create a better tomorrow", with strategic goals focussed on our customers, our people and one business.

We are starting to deliver on these goals—demonstrated in our recent revenue determination for transmission, where the regulator accepted our proposal to maintain service standards, with a materially lower forward operating and capital program. Together with a lower cost of capital, this resulted in a lower transmission revenue path, and lower customer transmission prices to 2019.

We are now preparing plans that outline distribution service revenue requirements for the period from 1 July 2017 to 30 June 2019. The period is shorter than usual to align future transmission and distribution reviews, recognising the integration of the network businesses.

We have been working hard to engage with our customers about current and future needs. The insights gained, along with the challenges and opportunities arising in the changing energy landscape, have helped shape our direction and priorities for the 2017-19 period.

I am pleased to present our Direction and Priorities Consultation Paper, which outlines the work we plan for the 2017-19 period. Key themes supporting our proposed level of investment are:

- caring for our assets to ensure safety is not compromised
- maintaining reliability of the network
- where we can safely do so, running our network harder rather than building more
- taking a whole of life approach to optimise cost and service outcomes for our customers
- working hard to ensure we deliver the lowest sustainable prices.

This paper includes a number of questions about key inputs to our forward plans. We look forward to hearing from you as we finalise our future plans which will be submitted to the regulator in January 2016.

Lance Balcombe
Chief Executive Officer

1. Background

TasNetworks provides the Tasmanian distribution network (the poles and wires) and the transmission network (the large towers and lines). This paper is focused on our distribution network services. Sometimes we refer to our network as the 'grid'.

In January 2016, we will submit our distribution proposal to the Australian Energy Regulator (AER). We refer to this submission as our "2017-19 Regulatory Proposal". The 2017-19 Regulatory Proposal sets out our expenditure plans, proposed revenues and network prices. The AER will assess our proposal, including through consultation with customers and by engaging expert consultants.

Our Regulatory Proposal will only cover the two-year period commencing 1 July 2017, instead of the usual five years. This timing will align the processes to set our future transmission and distribution revenues from July 2019 onwards.

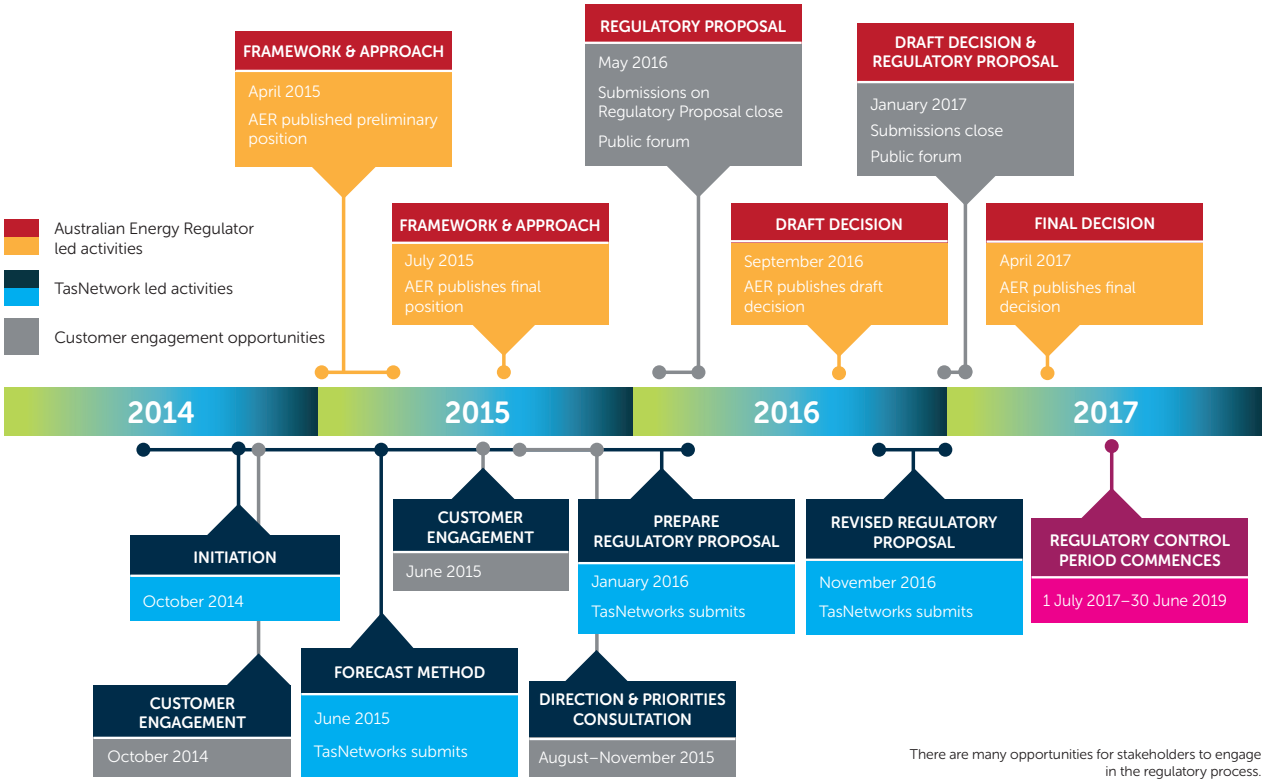
This approach responds to customer feedback: you want information on our network services as a whole, not just transmission or distribution services. It will also mean that in the future we will be able to better coordinate our planning and customer engagement activities across the integrated transmission and distribution network services.

As this paper is concerned with our 2017-19 Regulatory Proposal, it focuses primarily on distribution services that the AER regulates as 'standard control services' under a revenue cap.

We also provide some other regulated distribution services, under different revenue and pricing arrangements. These include metering, connection and street lighting services, which are subject to separate consultation processes.

There are many opportunities for customers to engage directly with either TasNetworks or the AER as part of these processes. Figure 1 summarises the 'road map' for the determination process, including consultation opportunities.

Figure 1 – Tasmanian Distribution Determination 2017 Road Map



This Consultation Paper is an important part of our stakeholder engagement process as we prepare our 2017-19 Regulatory Proposal. It outlines the feedback we have received so far from stakeholders, and our preliminary views on the activities and expenditure we propose to undertake during the 2017 to 2019 regulatory period. We also provide an indication of the likely impacts of network charges on customer bills.

Your comments on our preliminary expenditure forecasts and other aspects of our preliminary proposal are welcome.

2. Who we are and what we do

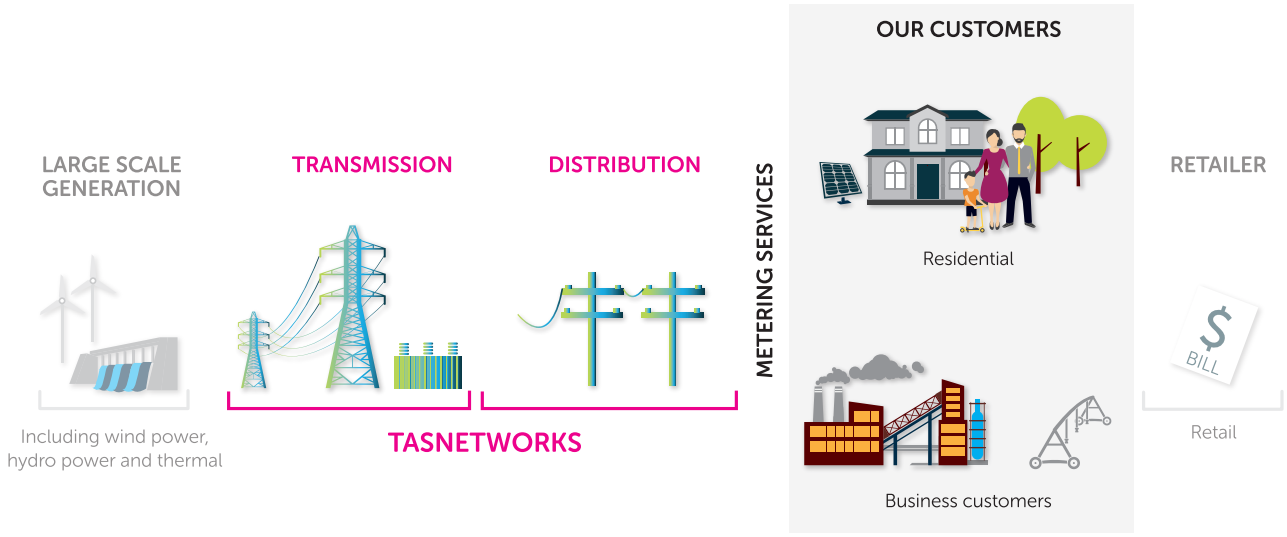
2.1 Our role

Tasmanian Networks Pty Ltd (TasNetworks) is a Tasmanian state-owned energy corporation that commenced operations on 1 July 2014.

We own, operate, and maintain the electricity network that delivers electricity to more than 280,000 Tasmanian connected customers and our services provide convenience to everyone in Tasmania. In delivering our services, we seek to create value for our customers, our owners and our community. Our role in the electricity supply chain and our customer service relationships are shown below.

Figure 2 – TasNetworks' customer service relationships

TasNetworks provides a variety of electricity network services for the transmission and distribution of electricity in Tasmania.



2.2 What it takes to deliver your power

TasNetworks is responsible for the **design**, **construction**, **reliability** and **maintenance** of the network that supplies power from the generation source to Tasmanian homes and businesses.

Reliable power means you can get on with your life and lifestyle. ▸

The network is made up of:

Transmission

3,500
circuit kilometres of transmission lines

8,500
transmission line support structures

11,000
hectares of easements

Distribution

15,000
kilometres of high voltage powerlines

5,000
kilometres of low voltage powerlines

2,000
kilometres of high and low voltage underground cables

222,000
poles

2.3 Our vision and how we work

Our vision is to be "trusted by our customers to deliver today and create a better tomorrow".

We tested our vision with our customers and stakeholders, asking what 'a better tomorrow' meant to them. We identified the key themes arising in responses.

This was the feedback:

2.4 A track record of balanced, efficient outcomes

In our first year of operation, we have delivered over $21 million in operating savings. Around half of these savings relate to the costs of providing distribution services.

We have maintained service levels, and importantly, kept our focus on the safety of our people and the community.

We have invested time in understanding our customers and improving the services we provide, leading to a 40 per cent reduction in customer complaints.

Our customer net promoter score[1] is positive—a great outcome for a new business.

[1] The study collected customer feedback on their experience, measuring, in particular, key measures such as Net Promoter Score, overall satisfaction and performance levels for 'Ease of doing Business'

"An analysis of the drivers of satisfaction with TasNetworks revealed that the main driver of satisfaction is 'living up to the vision as being trustworthy'. In fact, the concept of trust, and similar themed statements are common factors being high scoring drivers for satisfaction"

May 2015 TasNetworks Customer Satisfaction Survey by Customer Service Benchmarking Australia (CSBA)

2.5 How we compare to other businesses

Tasmania has a population of around half a million, and more than half the energy produced is used by large industrial customers connected to our transmission network. This is a far higher proportion than any other state.

Our distribution network serves a dispersed customer base across a diverse range of terrain, including a higher proportion of rural network than any other state. Over 75 per cent of our distribution network serves small towns and rural communities.

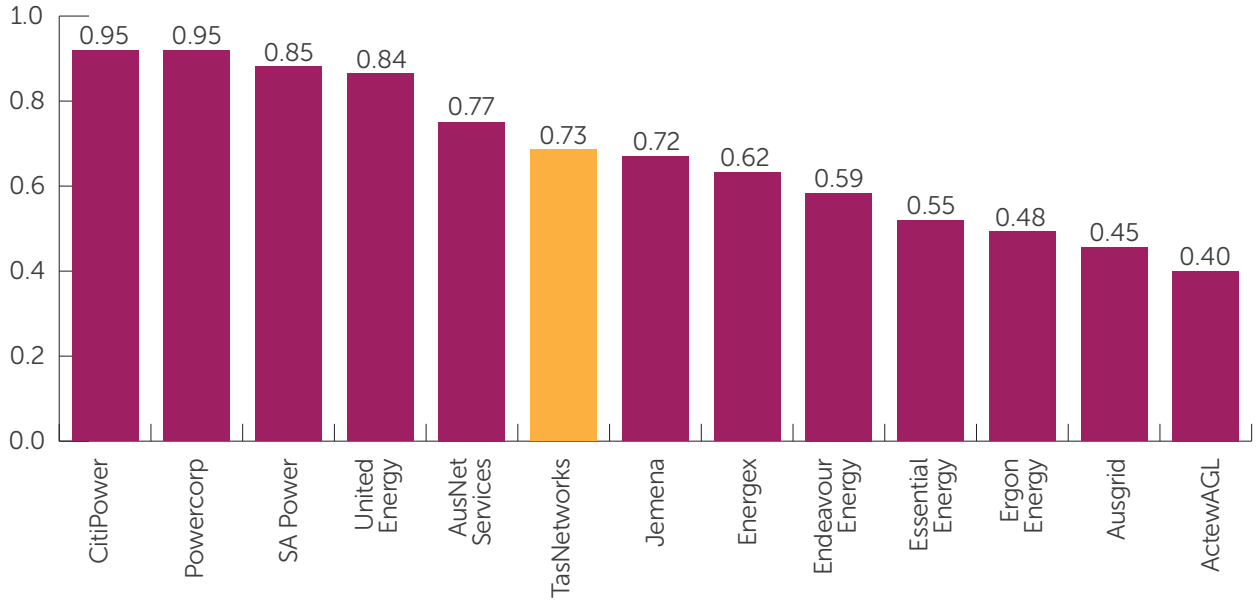
Networks can vary greatly in their scale and design. TasNetworks has a different voltage boundary between our transmission and distribution networks than many other Australian states: with connecting substations and transformers classed as transmission rather than distribution assets. Tasmanian peak load is in winter. Our lower, summer peak is also on days with cold weather.

Like other states, we have seen a rapid uptake of embedded solar generation. This generation has led to customers using less grid-delivered energy. However, as a winter peaking state, solar generation makes no contribution to offset the Tasmanian winter peak network load, which occurs on cold, short winter days. As battery technology becomes more cost effective, solar and batteries in combination may start to reduce peak demand on our network.

We have been working hard to sustainably reduce the cost of providing our distribution services across our capital and operating programs.

The AER uses benchmarking to measure and compare the operating efficiency of electricity distribution networks. We are using the AER's benchmarking data to understand how we compare with other network businesses and what we need to do better. In particular, the AER uses operating cost benchmarking to help to set expenditure allowances.

Figure 3 – Benchmarking using AER data - AER Stochastic Frontier Analysis Model, raw efficiency scores (the best performer has the highest score)



As Figure 3 illustrates, the AER's operating cost benchmarking places us in the top half of the Australian distribution networks over the period of 2006 to 2013. Our merger efficiencies and transformation program should see our relative performance improving over time.

3. Making customers central to all we do

Our success is anchored to the prosperity of our customers and we are working hard to embed a culture of 'customer first'.

To help us achieve this, we are committed to engaging with, informing, and educating our customers about our activities and plans for the future.

A well as incorporating our customers' views and expectations in our 2017-19 Regulatory Proposal, there are many examples of how we are prioritising customer engagement in our 'business as usual' activities, including:

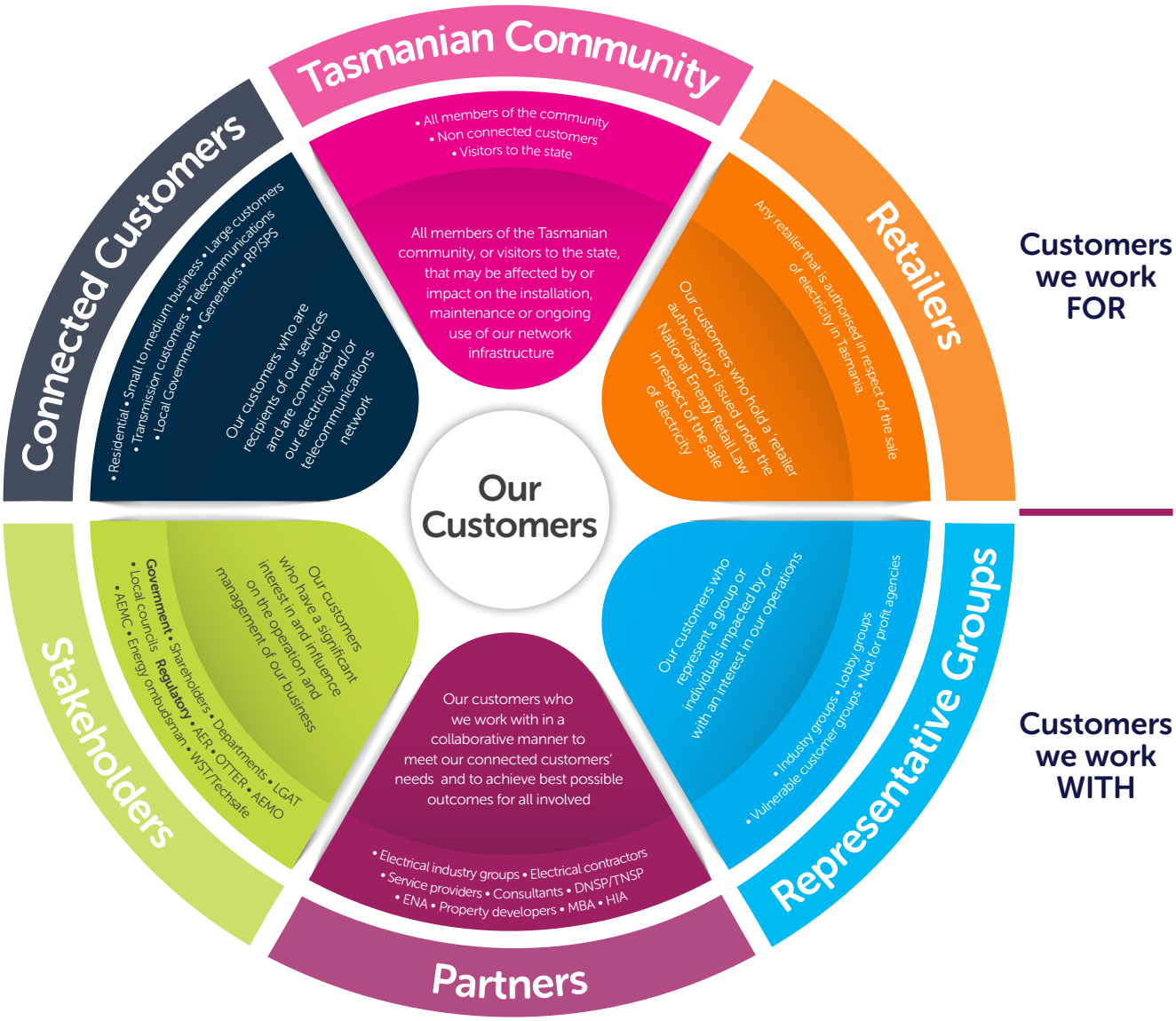
- Voice of the Customer Program, ensuring that we consider our customers' perspectives and 'voice' in our activities and decisions.
- dedicated Customer Service Strategy, assisting us to sharpen our focus on delivering quality service outcomes for our customers
- establishment of TasNetworks Customer Council
- monthly customer satisfaction survey
- Customer Segmentation Model and Engagement Framework

Our customer strategic goal is to understand our customers and make them central to all we do, with the ultimate aim of improving price, service and reliability outcomes for customers.

We recognise that we must understand and respond to matters affecting each of our customer segments if we are to deliver service propositions that meet their varied needs.

With this in mind, we take a very broad definition of 'customers', as illustrated in our Customer Segmentation Model, shown below.

Figure 4 – TasNetworks Customer Segmentation Model



The Customer Segmentation Model has been applied in our approach to establishing the TasNetworks Customer Council, whose purpose is to ensure that we engage and consult in a much broader way with the community.

The Council membership is made up of two to four representatives from each of the six customer segments to ensure we are inclusive and have an opportunity to build on our understanding of the needs of a broad and complex customer base.

We have also developed a TasNetworks Engagement Framework, which is based on the International Association of Public Participation (IAP2) Spectrum. This framework assists us in choosing the most appropriate level of customer participation that should be used when undertaking community consultation on particular issues. TasNetworks identifies the appropriate level of engagement on a case-by-case basis, as it is not always possible to provide customers with a decision making role, for example, on safety issues.

Figure 5 – TasNetworks' Engagement Framework

Increasing Level of Customer Participation

Customer Engagement Goal	**Inform:** To provide our customers with balanced and objective information to assist in understanding the problem, alternatives, opportunities &/or solutions.	**Consult:** To obtain customer feedback on analysis, alternatives and/or decisions.	**Involve:** To work directly with our customers throughout the process to ensure that customer concerns and aspirations are consistently understood and considered.	**Collaborate:** To partner with our customers in each aspect of the decision, including the development of alternatives and the identification of the preferred solution.	**Empower:** To place final decision making in the hands of our customers.
Promise to our Customers	We will keep you informed.	We will keep you informed, listen and acknowledge concerns and provide feedback on how customer input influenced the decision.	We will work with you to ensure your concerns and issues are directly reflected in alternatives we develop and provide feedback on how customer input influenced the decision.	We will look to you for direct advice and innovation in formulating solutions and will incorporate your recommendations into decisions where possible to the maximum extent.	We will implement what you decide.
Customer Engagement Tools	Fact Sheets Newspaper/TV/Radio Letters/Customer Cards Social Media Customer Charter Brochures	Focus Groups Community Forums Public Meetings Trade Nights Surveys	Workshops Consumer Engagement Forums	Advisory committees Contracts/Legal Agreements	Delegated decisions

Further information on our engagement framework is available at tasnetworks.com.au.

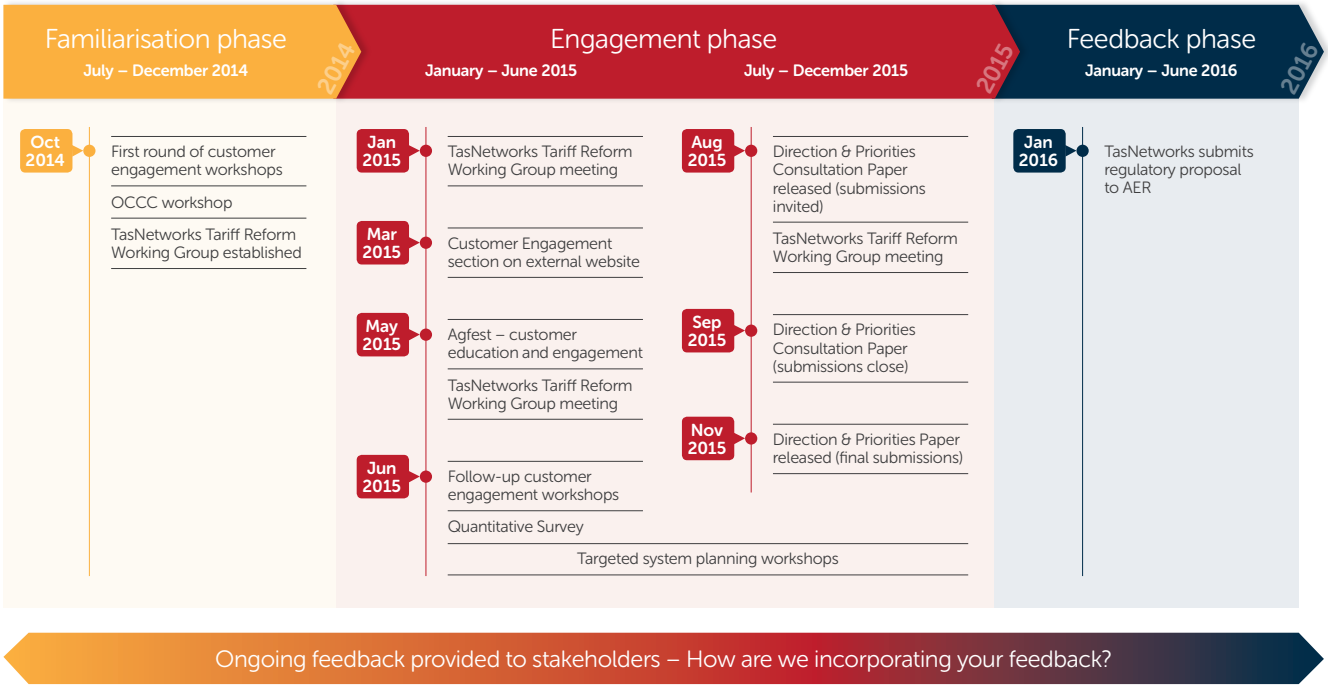
4. Our stakeholder engagement program

To guide the development of our 2017-2019 Regulatory Proposal, we have developed a customer engagement plan to build greater understanding about customers' current and future needs, concerns, and preferences. This is summarised below.

Our intention is that this will be the last time we will need to have a specific engagement plan for our revenue reset. Instead, our Voice of the Customer Program will mean that we are regularly engaging with our customers as a business-as-usual activity, including in our cycle of revenue-setting.

Figure 6 – Our plan to engage with you as part of our revenue reset

Revenue Reset Engagement Plan



Key engagement topics/requirements

- Forecast expenditure programs (operating and capital expenditure – including key strategies and projects)
- Proposed Connection Pricing Policy
- Network tariff principles, strategy and network tariff structure statement

This Consultation Paper outlines the insights collected through our engagement activities so far and as a result, our preliminary views on the activities and expenditure we propose to undertake during the 2017 to 2019 regulatory period.

Customer feedback to date has had a significant influence on our approach in preparing our future plans.

5. What our customers have told us

Feedback received across all of our engagement activities has been consistent:

- TasNetworks is currently perceived to be meeting most customers' needs from an overall performance perspective
- our most valued services include reliability/restoration of supply, followed by the management of the network to safely and reliably deliver electricity
- overall satisfaction of current reliability levels is quite high
- while improvements in reliability and outage response could strengthen satisfaction, customers are **NOT** willing to pay higher network prices for these improvements
- cost is the greatest concern and lower prices would lead to the greatest uplift in satisfaction

Most customers:

- are happy with their present level of reliability
- are happy to maintain the present level of reliability
- don't want us to spend more to improve reliability

Opportunities for improvement include:

- providing services at lower cost
- better information about restoration times
- addressing meter reading concerns
- addressing quality of supply issues such as voltage complaints
- using more responsive and modern communication tools (eg: SMS automatic messaging for outage updates) and improved online communication, especially for outages

"I think the service is fantastic but would like to see lower prices"

"Provide a reliable power supply at an affordable price and remain sustainable/ innovative in a rapidly changing environment"

"I don't want you to cut prices now, then have problems, so prices have to go up again in the future"

"They just need to keep the power on without it costing too much"

"I am happy with what I am currently getting"

What we did:

We have undertaken a range of activities to gather feedback and understand the concerns of our customers. All these separate pieces of the 'puzzle' have informed our direction and priorities.

Figure 7 – Our engagement activites

Copies of research reports and other information on the results of our customer engagement are available at tasnetworks.com.au.

1) **Are there any other key issues or messages that you want us to know about as we finalise our service and expenditure proposals?**
2) **Do you have any suggestions as to how TasNetworks could improve its customer engagement?**
3) **Do you think we should consider network educational programs as part of our customer engagement in the future?**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6. Our direction and priorities

In considering the insights we have collected through customer consultation, combined with our regulatory obligations and knowledge of the network, our investments for the 2017-19 period will be focused on five key areas:

1. Improving how we communicate with, and listen to, our customers
2. Ensuring the safety of our customers, employees, contractors, and the community
3. Keeping the power on, maintaining service reliability
4. Innovating in a changing world
5. Delivering services for the lowest sustainable cost

6.1 Improving how we communicate with, and listen to, our customers

Our future plans recognise that there is more to do to improve the way we communicate with our customers.

We are factoring in continuing expenditure to build customer relationships and platforms to better communicate with our customers. We have started this work, with much more to do.

6.2 Ensuring the safety of our customers, employees, contractors, and the community

You value safety and want us to keep managing our network safely

TasNetworks is committed to achieving our Zero Harm goals of:

- no harm to our people and the public; and
- minimising our impact on the environment.

Our commitment to our Zero Harm policy underpins our expenditure plans for the 2017-19 regulatory period.

To manage emerging safety risks associated with our assets, including in response to new Australian standards, there are some areas where we must increase our operating and capital expenditure.

We will also continue to focus on community and customer awareness of electricity safety risks.

6.3 Keeping the power on, maintaining service reliability

Our Reliability Strategy, to *maintain current overall network service levels,* aims to deliver on the expectations of all stakeholders, whilst meeting our Zero Harm goals and addressing the opportunities and challenges emerging in the changing energy landscape. The key inputs to our strategy are shown below.

Figure 8 – Our Reliability Strategy

The key feedback we have received from you that has informed our approach is:

- customers want the same service levels for the same price
- cost is the greatest concern
- present customer experience perceptions are aligned to actual service levels and expected service levels

In terms of network performance, based on the feedback we have received so far from customers, we propose to at least maintain current levels of distribution network reliability.

Distribution reliability is measured by two key indicators:

- average minutes without supply each year ("SAIDI[2]")
- average frequency of interruptions each year ("SAIFI[3]")

[2] System Average Interruption Duration Index

[3] System Average Interruption Frequency Index

Our targets for the 2017-19 regulatory period are:

- no greater than an average of 231 minutes per year, per customer without electricity supply (SAIDI)
- no greater than an average of 1.9 outages per year, per customer (SAIFI)

We also continue to apply the guaranteed service level (GSL) scheme using supply performance targets set by the Tasmanian Economic Regulator for different Tasmanian communities. Under this scheme, affected customers will receive a payment when our performance does not meet the targets. More information on the GSL scheme, is available at tasnetworks.com.au.

4) Do you support the proposed reliability strategy to maintain rather than improve existing levels of reliability?

We are continuing to refine our asset management strategies, to prioritise our expenditure to manage asset performance risks.

To maintain reliability we have a range of asset renewal programs, which involve replacing assets in poor condition. Some of these programs take a number of years to complete, and so we will continue many of our present programs into the forthcoming reset period.

For example, our wooden pole replacement program is driven by the condition of these assets, with a number of our poles nearing end of life. We will continue the replacement program already underway.

We also forecast some changes in expenditure to address risks associated with our aging asset base, including 'step changes' associated with new obligations.

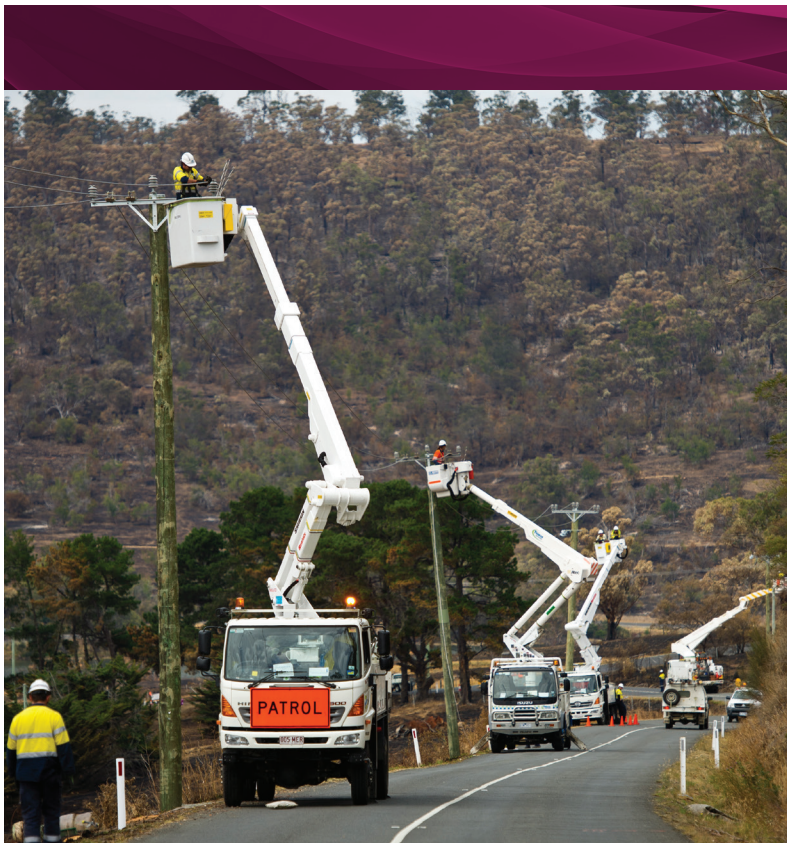
We also continue to forecast capital and operating expenditure to repair the network and restore services to customers after faults, including during severe weather events.

Our analysis suggests that some targeted capital expenditure in poorly performing areas of the distribution network will support lower operating costs in the medium term, including by reducing our reactive and emergency response costs. It will also support our reliability strategy.

5) Are there any particular aspects of our service performance that we should change?

6) Are there things we do well that you want us to keep doing?

7) Are there other issues you think we should take into account when we set our reliability strategy? If so, what are they?



6.4 Innovation in a changing world

The box below is a quote from John Bradley of the Energy Networks Association, highlighting some of the opportunities and challenges faced by electricity network businesses and customers within a rapidly changing world.

John Bradley, CEO of Energy Networks Association, July 2015:

Trends in technology and business innovation will make the grid a vital platform for a two-way exchange of energy and other services.

> "Dynamic changes in technology and falling costs will change the way customers use grid services but they will also provide enormous innovation opportunities for networks and other service providers.
>
> "Most of the serious solar companies in Australia and overseas see the integrated grid as vital to their business model and are leveraging the electricity network to create value for customers."

Mr Bradley said this approach recognised that, even with falling technology costs, it would be likely to cost customers 5 to 8 times more to try to replicate a grid service with a standalone power system.

> "The grid is vital to maximising the economic value to a customer of their solar installation today or an investment in storage tomorrow."

Mr Bradley said installed solar costs in Australia had fallen by up to 80 per cent in the last 5 years driven and continued to receive significant subsidies paid for by other electricity users.

"Significant subsidies have driven world's highest penetration rates of rooftop solar but they have also unintentionally exacerbated cross subsidies under outdated electricity tariffs, pushing up costs for other customers," Mr Bradley said.

We operate in a dynamic environment, with customers having more choices than ever before about how to best meet their energy needs.

A number of changes are being made to the National Electricity Rules to enhance customer choice and to support more informed decision making. Because we are revenue-capped, we can only recover the efficient revenue we are allowed by the AER each year. Changes to our network tariffs are to make network pricing more closely linked to customers' use of our network, and the value the network provides each customer.

Within this dynamic environment, we run our network harder, rather than building more, wherever we can do this safely. We have a track record of implementing novel solutions in our transmission network, including dynamic ratings and system protection schemes to defer or avoid costly network investment. We are using this knowledge and skill to address challenges in the distribution network.

We will continue to implement network solutions that provide the lowest sustainable network prices for our customers. We will continue to engage with our customers to ensure that the technologies we deploy are fit for purpose and deliver customer value.

Technology also creates challenges in planning and operating our network: solar Photovoltaic (PV) is a notable example, with significant increases in the number of installations over the past five years. Installation of medium-sized embedded generation in commercial settings is also increasing.

We are committed to finding innovative, least-cost ways to manage the network in an environment where the number and size of embedded generation installations is increasing, and energy flows, voltages, and customer requirements are changing.

Residential battery technology is likely to be the next trend, causing another major shift in the electricity market and network operation.

In addition, use of electric vehicles charged from the distribution network is likely to increase in the coming years. Electric vehicles are an opportunity to further utilise the network and we are currently sponsoring a feasibility study to encourage uptake by Tasmanian car fleet managers. We are considering how to best achieve successful integration of this technology with our network.

TasNetworks is taking advantage of technology advancements to increase the efficiency of the network. Our forward plans include operating and capital expenditure allowances that will enable us to exploit these opportunities, for the long term benefit of our customers.

6.5 Delivering services for the lowest sustainable cost

You don't want prices to rise and you want less volatility in prices from year to year.

6.5.1 Forecasting our revenue

The AER determines the amount of distribution revenue we can earn each year.

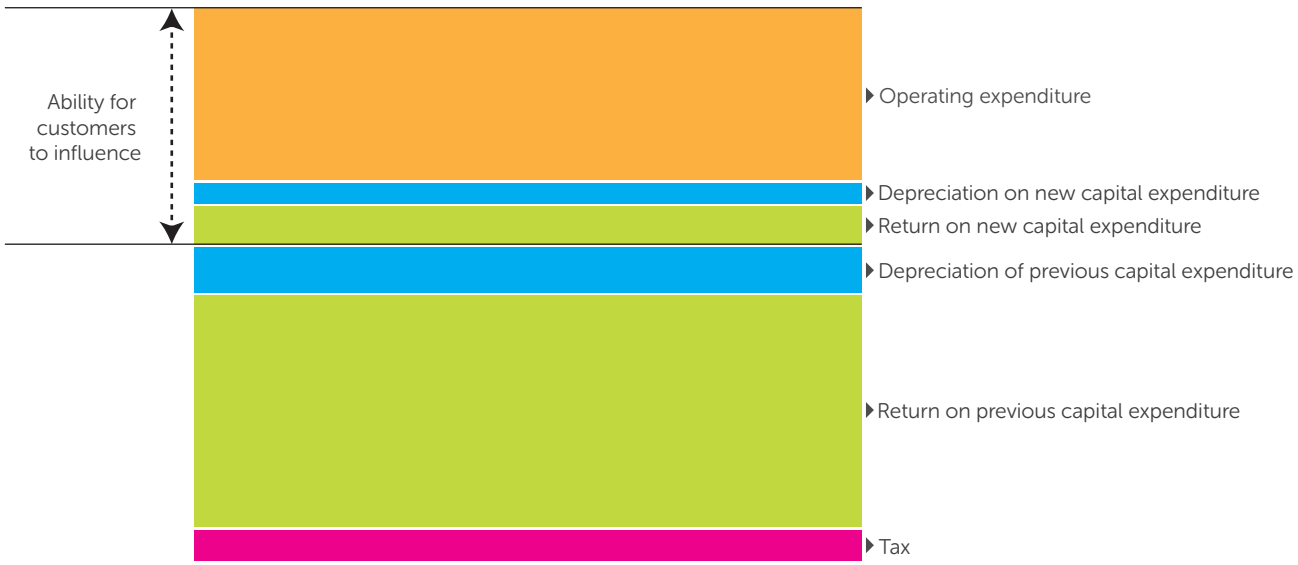
This allowed revenue can be adjusted from year to year, to reflect the outcome of incentive schemes and any over- or under-recoveries from previous years.

The adjusted distribution revenue, together with relevant transmission network charges, is recovered from our distribution customers.

The AER determines our distribution revenue using a 'building block' methodology.

Most of our revenue is to fund the long-life assets that provide services to our customers. This includes assets built each year, over the last 60 years.

Figure 9 – Revenue 'building block'



As explained in the following sections our preliminary expenditure forecasts and other aspects of our proposal are aimed at meeting customers' expectations that prices should not rise, and prices should be less volatile from year to year.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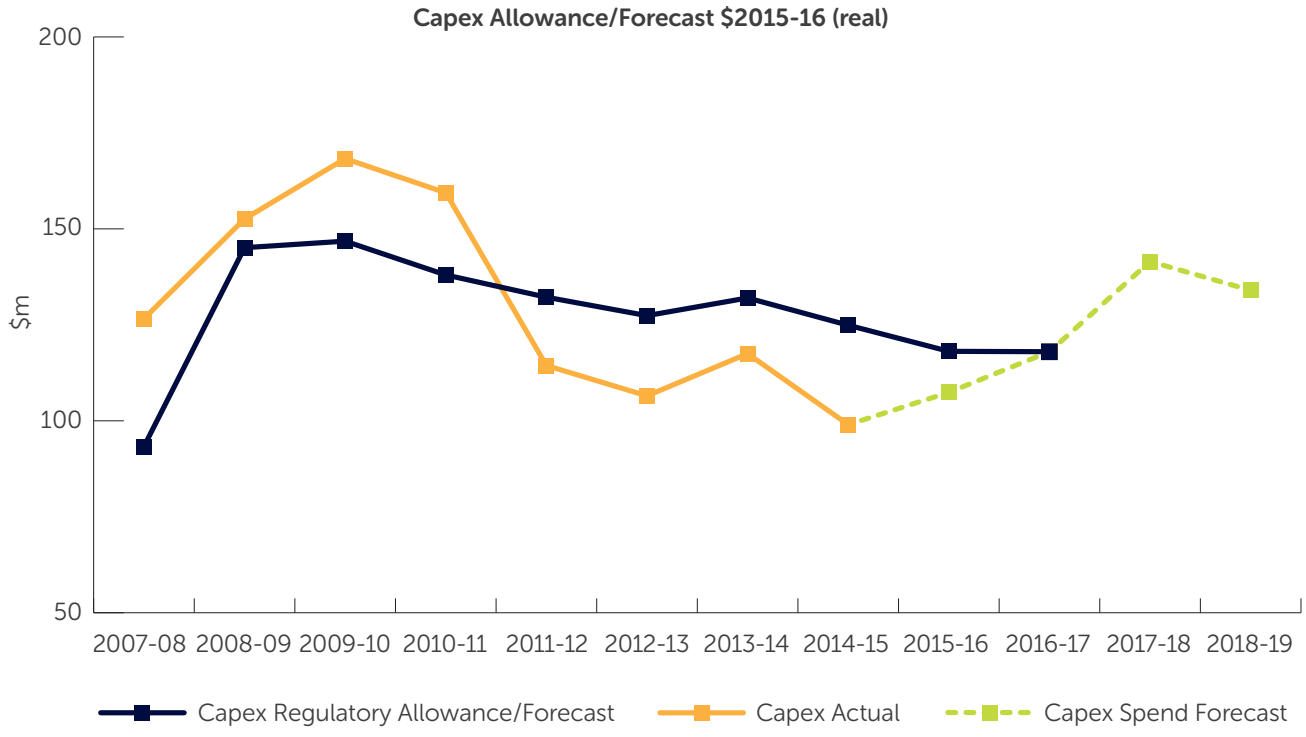
7. Our expenditure

Our preliminary forecasts for our future capital and operating expenditure have been developed in accordance with our Forecasting Method, which can be found at: tasnetworks.com.au/our-network/network-revenue-pricing/revenue-proposals.

7.1 Capital expenditure

7.1.1 Total capital expenditure

Our total capital expenditure for standard control services, including our preliminary forecast up to the end of the forthcoming regulatory period, is set out below. Our capital expenditure forecasts have been prepared inclusive (gross) of customer contributions.



We allocate our capital expenditure into two key categories, with a number of sub-categories:

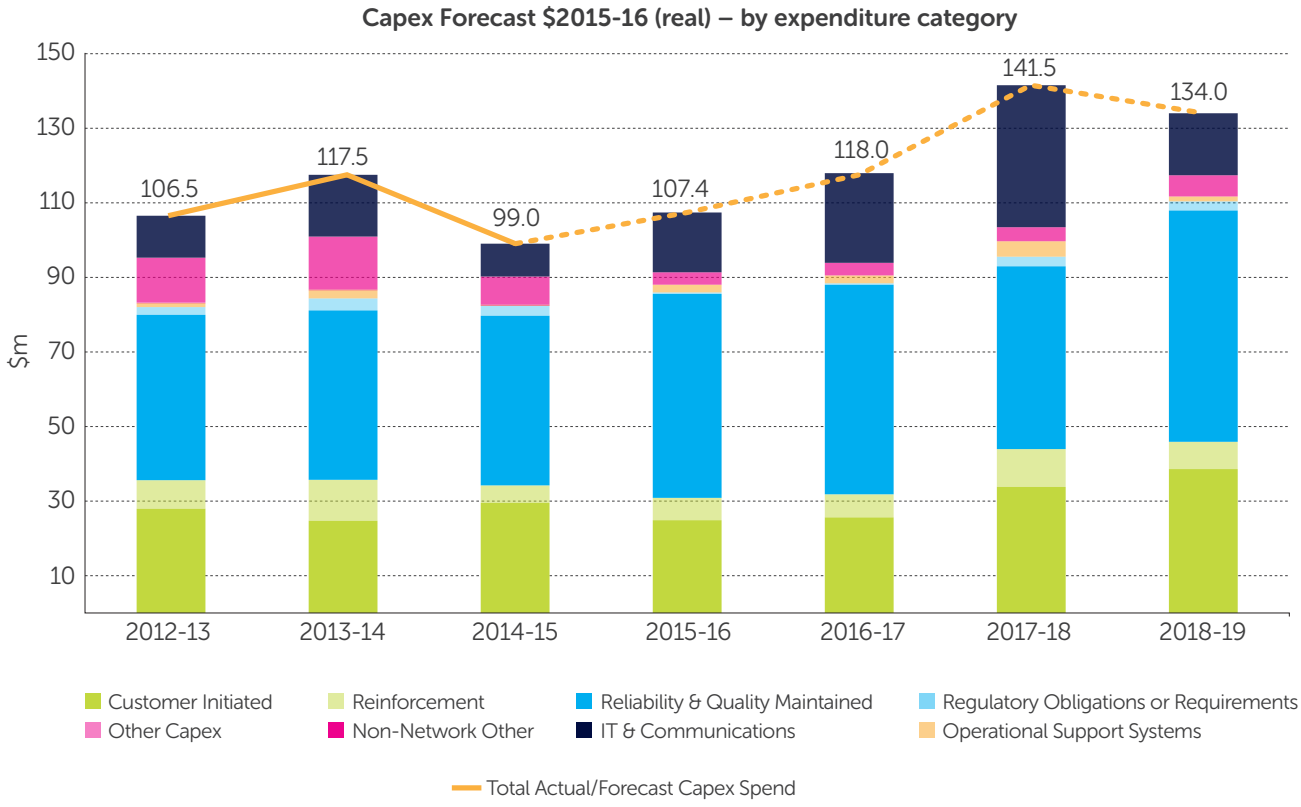
System

- Development (which includes expenditure to increase the capacity, augment or reinforce the network, together with customer-initiated expenditure for connection-related works)
- Renewal and enhancement (which includes expenditure to renew the network in line with modern safety, environmental and technical standards to maintain network reliability and quality, together with expenditure to meet new regulatory obligations or requirements)
- Operational support systems (which is expenditure on systems that support the operation of the network)

Non-system

- IT & communications (which are the systems that underpin the operation of the business and telecommunications)
- Non-system other (such as fleet and property)

The composition of our actual capital expenditure for the current regulatory period, and our preliminary forecast for the coming two-year regulatory period is shown below.



Based on our initial analysis, we consider that the efficient level of capital expenditure to allow us to sustainably deliver safe and reliable network services in 2017-18 and 2018-19 is higher than present levels.

This investment need largely reflects a number of recently identified underlying asset condition issues, growth in customer connections from recent low levels, and investment in business systems to release medium-term efficiencies.

Further details of our preliminary proposals in each expenditure category are set out in the following sections.

7.1.2 System

7.1.2.1 Development (reinforcements and customer initiated)

In Tasmania, the maximum demand for electricity occurs in winter. The forecast winter maximum demand helps us understand where our network may require reinforcement or demand side initiatives to manage the reliability performance risks.

In some areas of the state, we are seeing increases in summer demand as a result of investment in new irrigation schemes.

Our demand forecasts indicate that the peaks reached in the mid-2000s may not be experienced again until after the end of our ten-year planning horizon. Further information is available within our Annual Planning Report, which is available at tasnetworks.com.au.

Given our demand outlook, we are not forecasting the need for any more zone substation reinforcement expenditure in the next period. However, other reinforcement expenditure is rising, mainly to address fault level issues where some equipment is being used above its technical capability, which can cause safety issues.

Our customer-initiated expenditure is growing from recent levels, largely because of forecast new customer-initiated connection works. Connection levels are forecast to increase in line with more positive economic forecasts. Some connection-related works are funded directly by the customer, while others are funded through the revenue allowance. To calculate our net investment needs for connection works, we forecast the total capital cost, and then deduct the amounts that connecting customers are forecast to contribute upfront. As noted above, our forecasts in this paper have been prepared inclusive (gross) of customer contributions.

Changes to our connections pricing policy to align with a new national guideline will see many customers facing lower upfront connection charges. While these customers will benefit, more connection service asset costs will be funded by the broader customer base. This leads to a relatively higher revenue requirement for standard control services.

We have updated our Customer Connections Pricing Policy, and we are consulting separately on this policy.

7.1.2.2 Renewal and enhancement (Reliability & Quality Maintained and Regulatory Obligations or Requirements)

Our preliminary forecast reflects an increase in renewal and enhancement capital expenditure in the next period.

Our renewal and enhancement expenditure is critical in helping us maintain safe and reliable network services.

We must replace unreliable and aged assets that are in poor condition, to ensure that they do not present unacceptable safety or bushfire risks, or cause increased rates of power outages.

Taking these criteria into consideration, work programmed for the 2017–2019 regulatory period includes replacement or refurbishment of transformers in rural zone substations at Gretna, New Norfolk, and Richmond. We are also planning to replace transformers in our urban zone substations at Derwent Park and Claremont.

Additionally, we are increasing the number of pole cross-arm and distribution transformer replacements. The volume of ground-mounted switchgear to be replaced or refurbished is also increasing. These programs reflect that the asset condition has the potential to cause a safety issue.

We also plan to undertake a number of projects to improve the performance of seven critical high voltage lines in our network. This work will improve services to a number of customers who have experienced worse-than-average reliability in recent years. It will also help us to achieve our network-wide target of at least maintaining current reliability.

7.1.2.3 Operational support systems

We anticipate that Supervisory Control and Data Acquisition (SCADA) and Network Control systems (which are the systems that give us remote visibility of the network and the ability to remotely control the network) will require an increase in spending during the regulatory period. This will facilitate better visibility of our network, and also facilitate the introduction of additional telecommunications infrastructure to support improved operation of the distribution network.

7.1.3 Non-system

7.1.3.1 IT & Communications

Our preliminary forecast reflects an increase in our expenditure to support running our business, in particular investment in a new integrated business system. We must replace and upgrade old, high-risk, and duplicated asset management and business support systems following the merger of Aurora and Transend. Both previous businesses had identified the need for this investment, and the recently approved transmission revenue decision allows funding for the share of this work allocated to transmission services.

> In addition to managing risks associated with our present systems, the new solution will allow us to be more customer responsive, provide better information and analysis to support decision making, and support further efficiency gains as new systems and processes are implemented.

Our business systems must also be capable of handling the planned introduction of metering contestability. Our proposal for standard control services only factors in those costs we forecast to incur as a distributor. Other metering costs are part of the (alternative control service) metering service charges. Metering changes are discussed further in section 10.2.

7.1.3.2 Non-system other

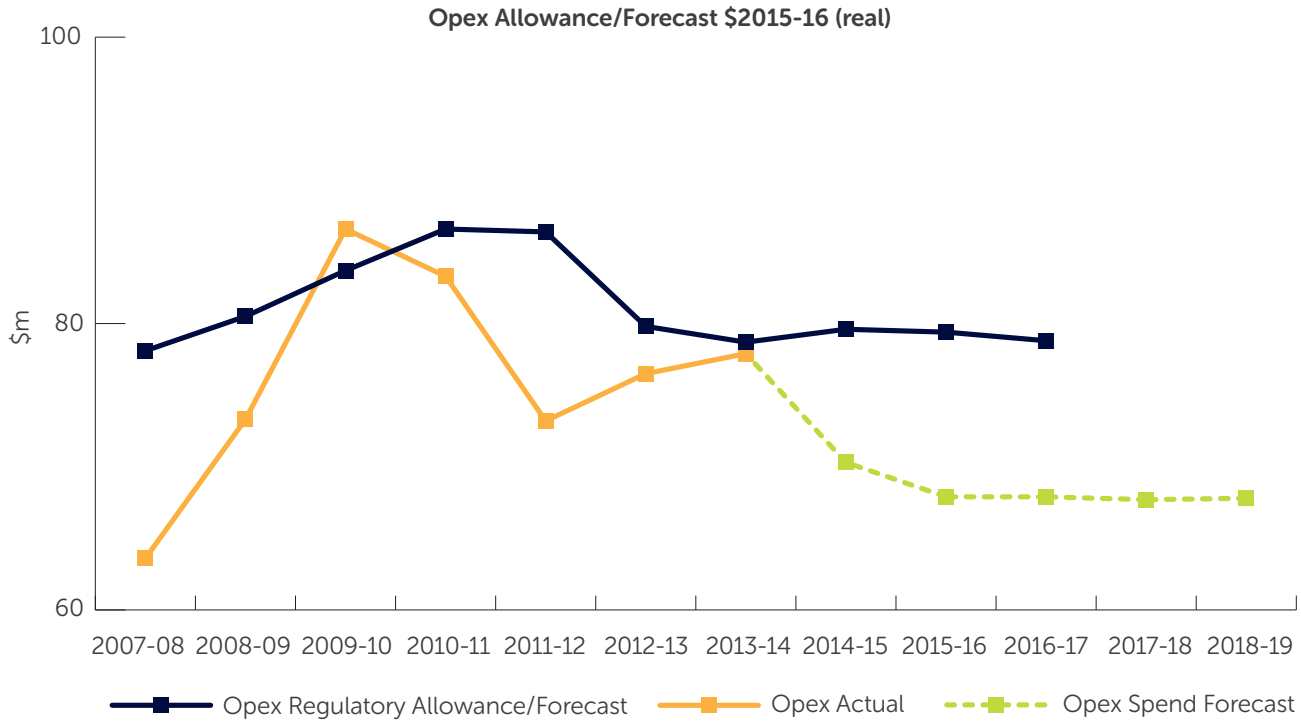
We are anticipating to continue with our existing, lower levels of expenditure for 'Non-system other', which includes expenditure on our vehicle fleet and property.

8) **What additional information would you like us to provide to support our capital expenditure forecast?**

9) **Do you have any feedback on our preliminary forecast capital expenditure?**

7.2 Operating expenditure

The diagram below shows our preliminary forecast operating expenditure ('opex') alongside our recent actual expenditure, and the allowances provided in previous AER decisions.



We allocate our operating expenditure into two key categories, with a number of sub-categories:

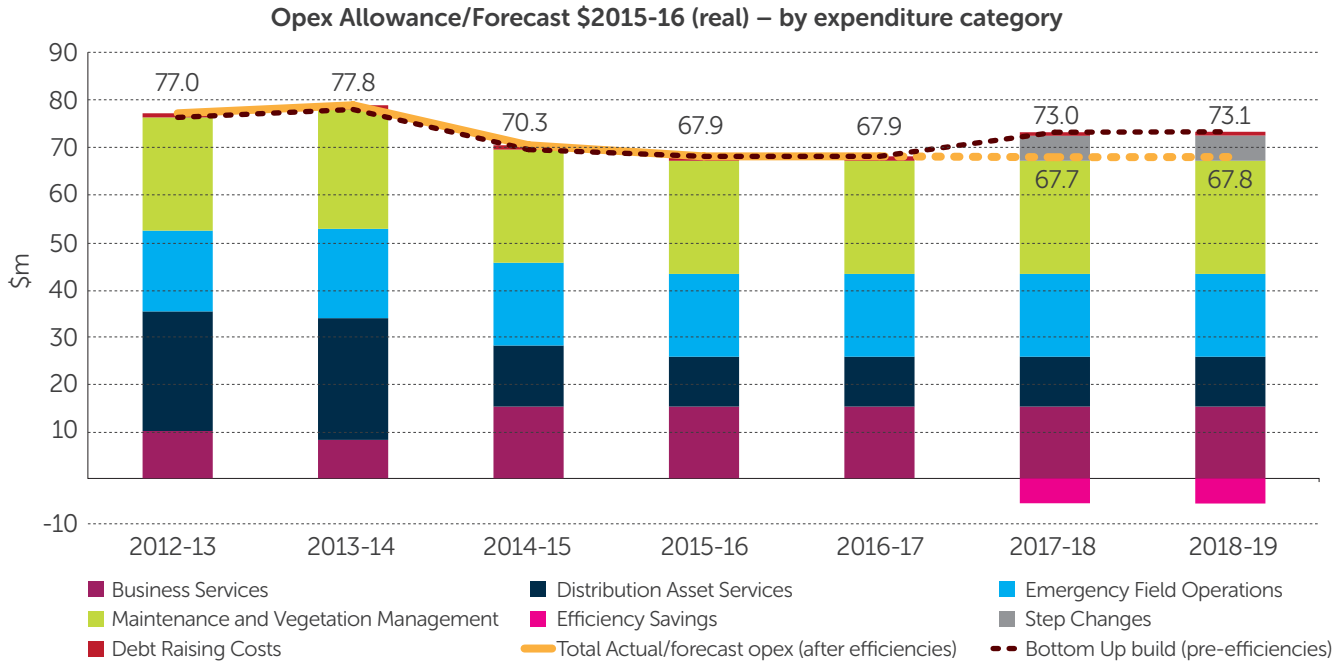
Maintenance

- Maintaining and operating the network (Maintenance & Vegetation Management)
- Emergency Field Operations

Running the business

- distribution asset services
- business services
- other operating expenditure

The composition of our actual operating expenditure for the current regulatory period, and our preliminary forecast for the coming two-year regulatory period, are shown in the diagrams on the following page.



We are expecting to achieve opex savings of $6.6 million (8.7 per cent) in 2014-15 for distribution standard control services, compared to our actual expenditure in the previous year.

Our preliminary total operating cost forecast for the five years from 2014-15 sees us working hard to sustain these savings, and find further efficiencies where we can. As a result, our preliminary forecast operating expenditure will remain lower than pre-merger levels.

Our preliminary opex forecast reflects a number of factors, including the continuing routine maintenance of our assets and responding to network faults. Our forecast includes expenditure to:

- maintain the safety of our people and the public, and minimise our impact on the environment, in accordance with our Zero Harm policy
- meet increased compliance and safety standards, and undertake associated asset inspection and testing. While there are increased costs associated with these changed standards, we expect benefits to be provided in terms of reduced safety risk and reduced fire starts
- ensure that the performance of our assets meets our target of at least maintaining network reliability, at the lowest total life cycle cost
- implement systems and processes to better understand the condition and risk associated with our key assets. This will enable us to make more efficient decisions about the timing of maintenance or replacement of the assets. We expect to undertake more planned maintenance, but less reactive maintenance, leading to minimisation of total life cycle costs. This strategy also helps us achieve our reliability targets.

Our operating expenditure proposal will include operating efficiencies and cost savings from our new asset management practices and the integrated business systems we plan to roll out over the next three years. We will also work hard to find other productivity gains, to offset cost increases.

10) What additional information would you like us to provide to support our operating expenditure forecast?

11) Do you have any feedback on our preliminary forecast operating expenditure?

7.3 Indicative annual revenue and charges

Based on the preliminary expenditure forecasts outlined above, the chart below shows our forecast total revenue requirement alongside the regulated revenue allowance since 2013-14, for a range of different weighted average cost of capital (WACC) scenarios.

The 'WACC' is the allowed rate of return on our regulated assets. It is set by the regulator, to provide the owners of our business with a rate of return on their investment that is appropriate for the risk of that investment.

The 'high WACC' scenario is based on continuation of our present WACC. Since the last distribution determination there have been changes in market conditions, which mean we think it is more likely that the WACC will be lower than our present level. As the WACC will not be set until April 2017 it is hard to forecast, so we use a number of scenarios.

The chart shows that in all scenarios, our allowed revenue is expected to fall in real (constant dollar) terms over the 2017–2019 regulatory period (Figure 10). In nominal terms, (using dollars of the day) our allowed revenue increases under the assumption of the continuation of our present WACC (Figure 11).

This is before any under-recoveries from previous years, or incentive allowances as a result of performance. Because of these allowances, actual revenue recovered in a year varies from the AER's revenue decision allowance and may be higher.

7.4 Incentive payments

The regulatory framework includes a range of incentives to make sure we focus on keeping costs as low as we sustainably can, while making sure service doesn't deteriorate. There are also incentive allowances for demand management initiatives:

- Capital and operating incentive payments from the previous period are factored into the revenue cap, as part of our forecast and the AER's decision.
- Service incentives lead to adjustments to the revenue cap each year. We face financial penalties if performance is worse than target, or rewards for above-target performance.

The Service Target Performance Incentive Scheme (STPIS) measures service outcomes in terms of length of outages (SAIDI) and frequency of outages (SAIFI). It also includes a component that measures how well we respond to phone calls from customers.

Under current arrangements, if we perform better than our targets we can receive a reward of up to five per cent of our allowable revenue. The same level of penalty applies in relation to poor performance. It is conceivable, therefore, to see **an annual change in revenue of up to 10 per cent**, leading to similar changes in network prices to customers.

In line with feedback that customers do not like volatile prices, we want to reduce this source of volatility. This can be done by reducing the annual bonus and penalty scheme to 2.5 per cent. This still provides us with a strong financial incentive to maintain service, balanced with incentives to sustainably reduce costs.

We want to reduce the level of the financial incentive for service performance. We do not want to modify or reduce the level of service.

In our interactions to date, customers have been supportive of this change.

12) Do you support our proposal to provide greater network price stability by reducing the financial incentives we face under the STPIS arrangements?

In addition to the STPIS incentive arrangements, we must compensate individual customers if they experience too many outages during the year, or outages that exceed a specified duration. This arrangement is called the Guaranteed Service Level or GSL Scheme. We are not proposing to change the GSL Scheme.

8. Network pricing

Our adjusted distribution revenue allowance for each year, together with relevant transmission network charges, is recovered from our distribution customers via energy retailers.

This is done through a framework of network 'tariffs', which are applied to each customer. Network tariffs are used to determine the cost of network services for each distribution customer. However, rather than charging the customer directly, in the National Electricity Market these distribution network charges are levied on retailers. Retailers in turn develop retail tariffs.

Retail tariffs reflect how each retailer packages its input costs for particular customers, including network tariffs, wholesale energy, renewable energy target, market charges and the cost of providing retail services. It is the retail tariffs that customers see in their retail bills.

There are similar models for other customer services: for example an internet provider or phone provider may package up the network costs, together with data and/or call traffic used across that network, to provide a range of retail product offerings to customers.

This paper is concerned with the network tariffs TasNetworks charges electricity retailers, with network costs presently making up nearly 60 per cent of the average Tasmanian residential and small business customer electricity bill[1].

TasNetworks calculates network charges for each customer's installation, based on the network tariff(s) applicable to that customer. There are currently 24 different types of network tariffs, which depend on the customer type (for example, residential, commercial or industrial) and the customer's forecast usage. Apart from some very large industrial customers, each customer is allocated to a particular network tariff or network tariffs.

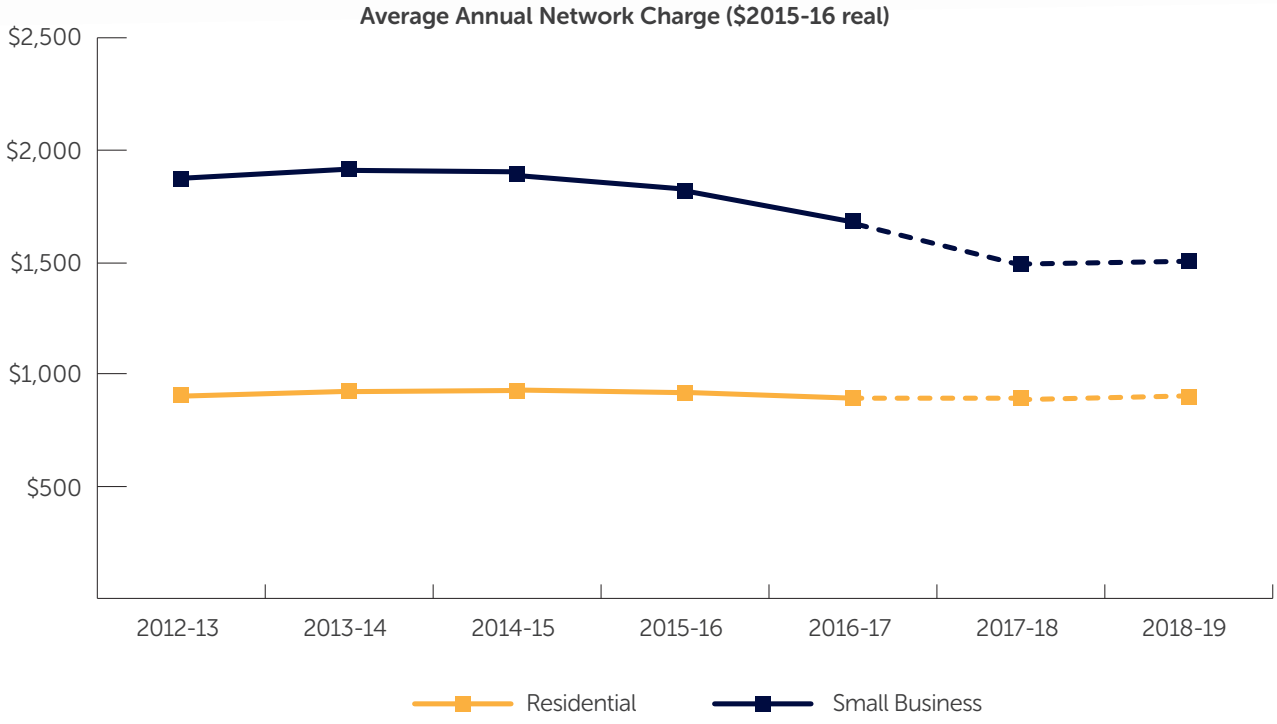
To determine the pricing associated with each network tariff, TasNetworks takes our allowable revenue and allocates it across the different network tariffs, in accordance with a range of regulatory requirements. As most network tariffs presently have a large element of consumption-based pricing, we forecast future energy consumption for customers under each type of network tariff. Therefore network pricing outcomes, to a large degree, reflect forecast revenue and forecast consumption levels for different types of customers.

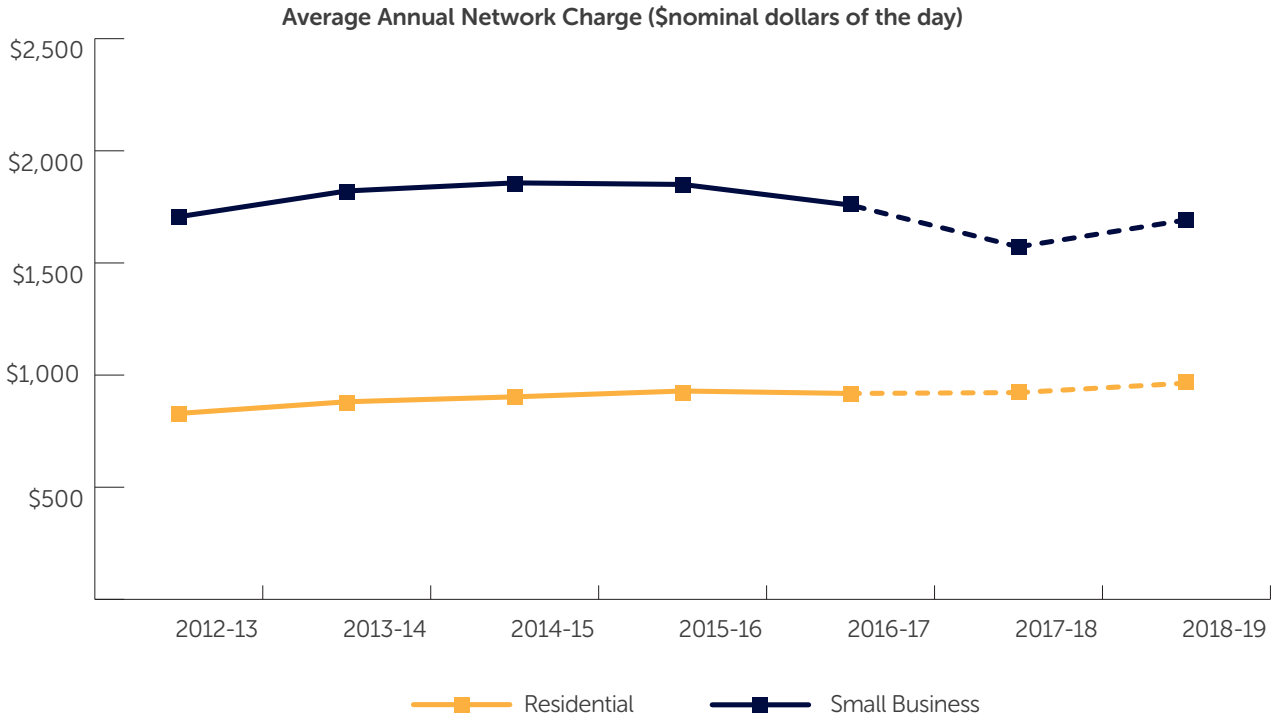
The charts on the following pages show in both real (constant) and nominal (dollars of the day) dollar terms how forecast revenue outlined in this consultation paper is expected to result in projected annual network charges for typical residential and small business customers. This analysis is based on the preliminary expenditure proposals outlined previously, and a WACC scenario of 6.23 per cent.

The scenarios assume no under-recoveries or incentive payments from the current regulatory period, so may understate future average network charge impacts. Also, if consumption is lower than we presently forecast, network charges may be higher. Conversely, if consumption is higher than forecast, network charges may be lower. Our forecasts of network charges on residential and small business customers are therefore highly indicative.

The network charge component includes forecast transmission charges and distribution charges. Transmission revenues are set until July 2019, so TasNetworks has used this revenue to estimate the transmission component of the distribution customer network charge.

[1] Source: Office of the Tasmanian Economic Regulator, based on 2014-15 standing offer prices


Average Annual Network Charge ($2015-16 real)
$2,500
$2,000
$1,500
$1,000
$500
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
Residential
Small Business


Average Annual Network Charge ($nominal dollars of the day)
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$500
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
2018-19
Residential
Small Business

9. Sending better price signals

The prices charged for network services around Australia are not cost-reflective, as they are largely based on how much energy a customer uses, not how much network demand the customer may use. This is encouraging some customers to reduce energy consumption to save money, but without necessarily reducing their use of the network at peak times. As a consequence, while under existing pricing arrangements there has been a reduction in electricity consumption, we haven't seen a proportionate reduction in the overall requirement for network services.

This issue has given rise to a rule change that requires network companies to transition towards more cost reflective tariff structures over time. The new rule requires us to comply with the following network pricing principles:

- Tariffs must be developed in line with the new customer impact principle that requires us to consider the impact on consumers of any changes in network prices. We must also develop price structures that are able to be understood by consumers.
- Network tariffs must be based on the long run marginal cost of providing the service.
- The revenue to be recovered from each network tariff must recover our total efficient costs of providing services in a way that minimises distortions to price signals and that encourages efficient use of the network by customers.
- Network tariffs must comply with any Tasmania-specific legal requirements for pricing, and must do so transparently and only to the minimum extent necessary.

More cost reflective network tariffs, developed in consultation with retailers, can help customers recognise and pay for the value the network provides to them and help customers to make better investment and energy use decisions. Improved price signals may reduce the need for substantial new capital investment in the network which can help keep costs down for everyone over the longer term.

We fully recognise the strong community concern about electricity prices. In particular, customers have voiced strong concern about the potential removal of the uncontrolled energy network tariff (a network tariff that provides a heavily discounted network charge for hard-wired heating and hot water, at the time our network is most heavily loaded). Our initial consultation sought feedback on our proposal to remove access to this network tariff for new customers from 2017. Having considered customer feedback we have now decided not to proceed on this basis.

In developing our network tariff strategy we will ensure that the transition towards more cost reflective tariffs occurs gradually, over time in order to avoid any potential for sudden adverse price impacts on customers. Our focus is to deliver predictable and sustainable network charges over the longer term, without big changes to prices from year to year.

Our initial view is that time of use demand-based network tariffs may be the best network tariff structure to reflect the costs of providing network services, to benefit our customers and to satisfy the pricing principles in the national rules. This is a concept we will continue to explore further.

It is important to remember that TasNetworks' revenue for each year is revenue-capped; we can only recover the efficient revenue we are allowed by the AER to provide network services, including any over- or under-recoveries from previous years. Therefore, changing the structure of our network tariffs is not about increasing our revenue. Any changes to our network tariff structures will serve no other purpose than to support the more efficient use of, and investment in, the Tasmanian electricity network for the benefit of our customers.

We have established a TasNetworks Tariff Reform Working Group to provide advice on stakeholder needs and issues relating to network tariff arrangements. The TasNetworks Tariff Reform Working Group includes electricity retailers, customer advocacy groups, business associations and energy advisors.

We have also consulted with end-use customers through a series of workshops in October 2014 and June 2015, and received a number of submissions on our initial network tariff strategy.

We continue to engage with our customers on our network tariff strategy and welcome further feedback.

More information can be found on our website at:
www.tasnetworks.com.au/customer-engagement/engagement-activities-and-outcomes

13) What information would you like to better understand TasNetworks' proposed network tariff strategy?

14) What feedback do you have on our proposed network tariff strategy?

15) Is there other information you think we need to help us finalise our network tariff strategy?

10. Other services

10.1 Ensuring timely and efficient connection services for our customers

In parallel with the preparation of our 2017-19 Regulatory Proposal, we are improving our connection processes and developing a new Connection Pricing Policy.

These changes support our business goals of streamlining processes and simplifying service offerings for our customers.

In addition, we must comply with Chapter 5a of the National Electricity Rules and the AER's Connection Charge Guideline, released in June 2012.

We will be consulting and engaging with key stakeholder groups over coming months to discuss connection pricing principles, and ensure that customer views are considered in the development of a new connection pricing policy.

10.2 A changing outlook for metering services

Changes are being proposed to the National Electricity Rules to introduce competition in the provision of metering and related services to residential and small business customers. This is known as 'contestability'.

The nature and timing of the final metering rule changes are not yet known.

As these rule changes are unlikely to be finalised in time to be factored into our plans lodged in January, we will need to make some assumptions.

We will update our plans and consult with customers as the new requirements become clearer.

10.3 Maintaining a safe, secure and reliable public street lighting system

Technological change and a desire to reduce costs have meant that many recipients of TasNetworks-provided public lighting services are investigating the means to undertake the provision of these services in their own right.

Some councils and other road authorities are considering new technologies that were not envisaged as recently as three years ago.

TasNetworks has already negotiated with two large local government authorities for these authorities to undertake the provision, maintenance, and operation of some public lighting services in their areas. Other local government authorities are now seeking to do the same in their areas.

We are working with our customers to provide public lighting services through bilateral negotiation to produce more efficient, customer-focussed outcomes.

11. Next steps – Have your say

We are keen to receive your feedback on the direction and priorities outlined in this paper. Your input will help to ensure that we have a strong foundation for the detailed proposals we must submit for the 2017-2019 regulatory period.

16) Is there anything that our direction and priorities hasn't considered that is important to you?

17) Is there any other feedback you'd like to give us on our directions and priorities?

There is no standard format for submissions, but it will help us to understand your views if you indicate clearly which parts of the Consultation Paper you are commenting on. You may wish to provide answers to some or all of the questions in the paper, but you don't need to. You may raise any matter in your submission that is of interest or concern to you.

You can make a submission by:

- emailing your submission to: DD17@tasnetworks.com.au
- going on line at: tasnetworks.com.au/customer-engagement
- posting your submission to:
  Program Leader Revenue Resets
  PO Box 606
  Moonah Tas 7009

Unless your submission requests otherwise, we will publish all the submissions we receive on our website. We think this will promote better awareness of the issues of importance to different stakeholders. We may also include excerpts from submissions in our regulatory proposal, which will be lodged with the AER in January 2016.

In order for us to have sufficient time to consider your submission we must receive it by 5pm Friday 25 September 2015. We will accept later submissions, but may not take them fully into account when finalising our plans.

After we have considered all submissions, we will publish a further paper in November setting out our proposed direction and priorities. The paper will provide a summary of the key themes emerging from submissions on this Consultation Paper, and explain how we have taken customer feedback into account in formulating the direction and priorities we intend to reflect in our Regulatory Proposal.

We encourage you to comment on any matter of interest or concern to you as we prepare our plans and proposals for the next regulatory period.

We look forward to receiving your input.


TasNetworks

Tasmanian Networks Pty Ltd