

# Improving the way we price our services





# Who is TasNetworks?

TasNetworks commenced operations on 1 July 2014. We were formed by merging Aurora's distribution network (the poles and wires) and Transend's network (the big towers and lines).

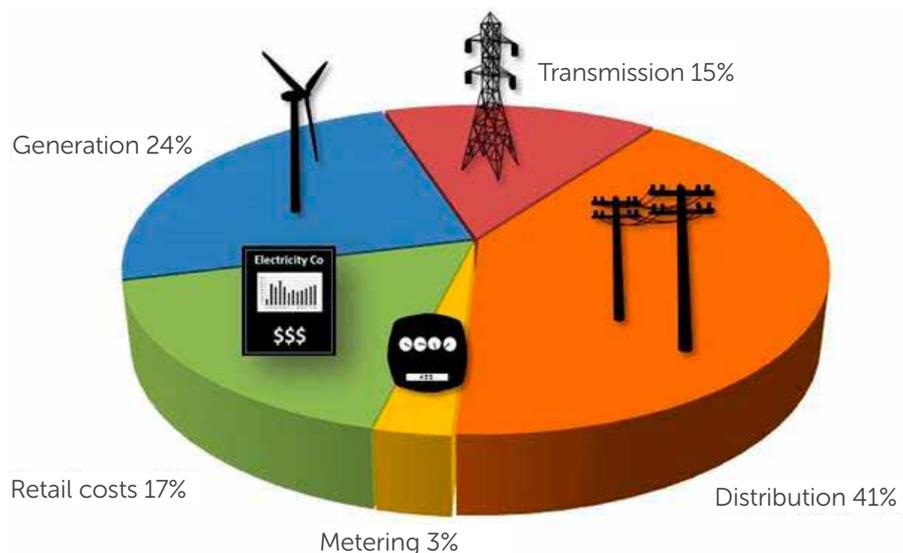
We supply the power from the generation sources to homes and businesses through a network of transmission towers, substations and powerlines. We also:

- build, maintain and operate the network
- establish new connections where infrastructure does not currently exist
- respond to network outages, faults and make repairs
- operate and maintain a Customer Service Centre
- read, replace and repair meters
- provide education, advice and information about electrical safety

The use of the network and the associated services we provide are paid for by customers, through their electricity bill.

Figure 1 | A typical residential bill

The figure right shows the cost breakdown of a typical residential customer's bill, which includes the percentage of network costs, generation costs, retail costs, and other costs.



# Our revenue is regulated

While customers can choose a different retailer, it is not possible to choose a different electricity network company. TasNetworks is the only electricity network company in mainland Tasmania.

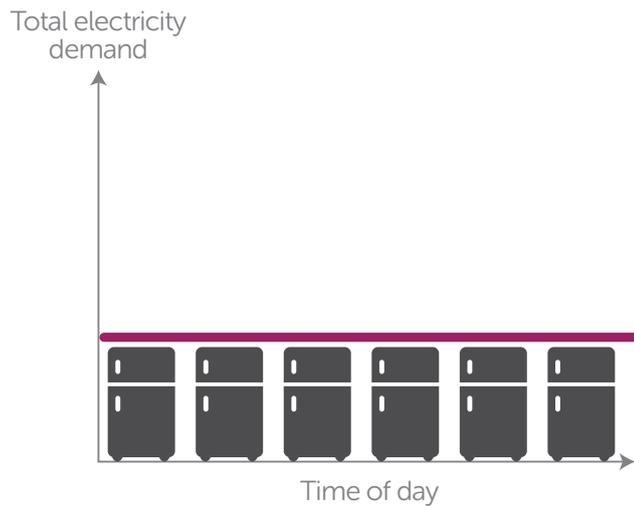
As a monopoly, the amount of revenue we are able to earn over a five-year period is determined by the Australian Energy Regulator. In setting our revenue allowance, the regulator expects us to improve our efficiency by reducing the costs of the services we provide and improving the quality and reliability of our services. TasNetworks is committed to delivering better outcomes for our customers.

## What are network tariffs?

Network tariffs are the range of prices (or 'tariffs') for different network services. We obtain our revenue through network tariffs. Retailers consider our network tariffs when calculating your electricity bill. Network tariffs are usually linked to either consumption or demand units of measure.

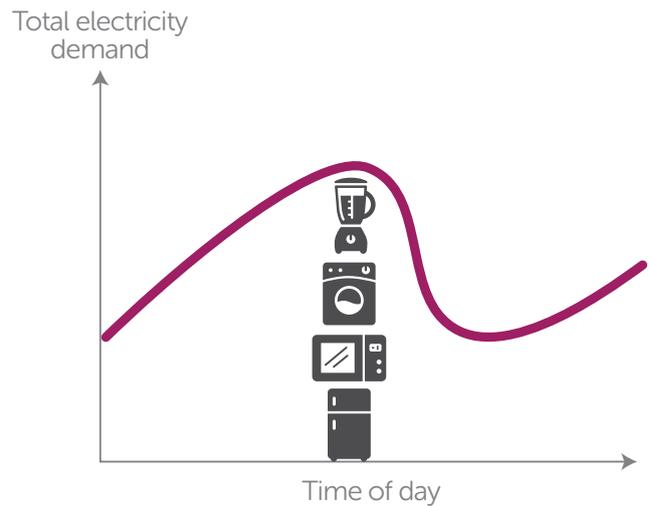
Electrical demand is not the same as consumption. 'Consumption' refers to the amount of energy used over a period of time, while 'demand' refers to the rate at which electricity is being drawn from the network at any given time.

### STEADY DEMAND



One appliance on all of the time, creating a steady demand.

### PEAK DEMAND



A number of appliances in use at the same time, creating an increase in demand.



Network tariffs may include one or more of the following types of charges:

- **Fixed charges –**  
Where customers pay the same dollar amount, regardless of how much electricity they use.
- **Consumption charges –**  
Where customers pay for each unit of electricity they use.
- **Time of Use consumption charges –**  
Where customers pay for each unit of electricity they use, and pay different unit prices depending on the time of day electricity is consumed.
- **Demand charges –**  
Customers pay depending on the maximum amount of electricity they use during a particular period. For example, the charge may be applied to the maximum amount of electricity consumed by the customer:
  - during a single day in a billing period; or
  - during the 'peak periods' when the electricity network is under maximum stress.

TasNetworks currently has 24 different types of tariffs, which employ various combinations of these charges.

We assign customers to particular network tariffs according to the customer type (for example residential, commercial or industrial) and the customer's forecast usage.

**If a customer prefers a different type of tariff, a change may be requested either through us or through the customer's retailer.**

There may be costs associated with changing tariffs, for example, if a new meter is required.

# Why are tariffs important?



As TasNetworks is a monopoly service provider, the Australian Energy Regulator provides us a revenue allowance to meet our service requirements and to ensure customers get a reliable and affordable electricity supply.

As well as deciding how much revenue we are able to earn, the regulator also approves the design of our network tariffs. The National Electricity Rules have recently been changed to improve the regulation of network tariffs.

TasNetworks designs its tariffs in consultation with its customers, understanding the importance of correct tariff development. However, tariff design is undertaken with the ultimate view that tariffs must be approved by the regulator.

To understand the importance of network tariffs, it is useful to consider the drivers underpinning expenditure on the distribution network. The distribution network is built to cater for peaks in demand, such as the peak that occurs on weekday morning as people get ready to go to work or school.

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**In much the same way that we need more lanes on roads to accommodate vehicles during peak periods, we require additional network capacity to meet our customers' total demand.**

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Unlike a road system, electricity cannot be 'slowed down' or 'sped up'. If the electricity network is unable to cope with peak demand, the voltage of the network will drop, which can stop electrical appliances from working.

A similar comparison can be made with stormwater drains. In dry weather, stormwater drains only have to cope with a modest amount of water, but they have to be big enough to cope with a flood.

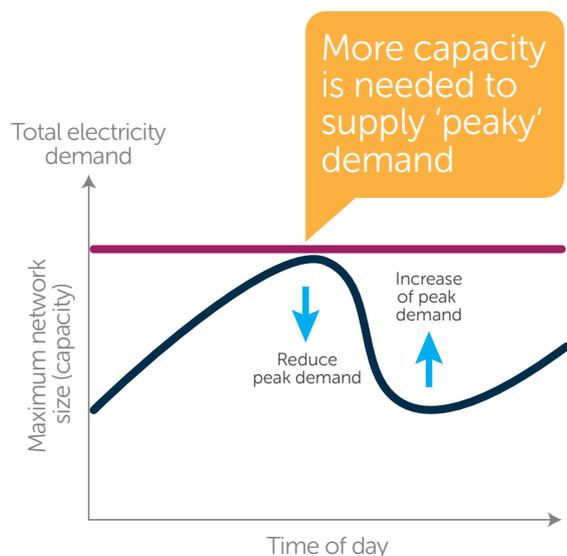
Electricity networks are built to cope with the highest power flows their customers draw from them. If those surges in use are rare, this is a very ineffective use of the network, as most of the network capacity is hardly ever used—it sits there like an empty stormwater drain. In Tasmania, our electricity use fluctuates less than other mainland states where air conditioning load on very hot days results in a huge surge in demand.

Customers pay for using our network through our network tariffs. If the network tariffs are poorly designed, they may encourage customers to use the network at times when it is already operating at maximum capacity. By encouraging smoother demand, over time, we can reduce the size of our network—and the costs of providing services.

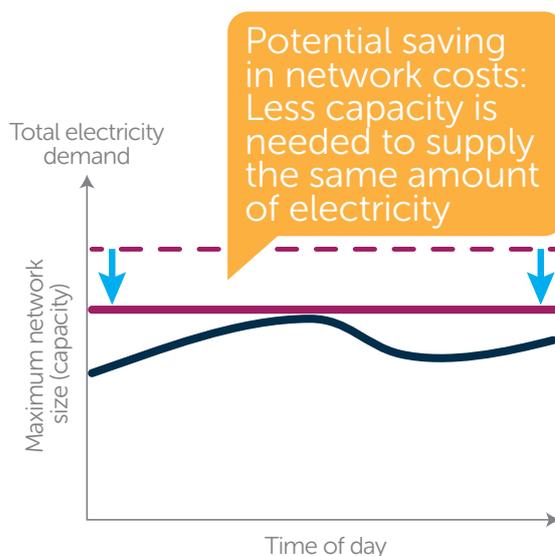
This means that over a period of time it may take less network capacity—poles and wires—to serve our customers if the total demand at peak times is lower. This could be achieved by shifting demand from peak to off-peak periods, as illustrated in the diagram over page.



### More capacity is needed to supply 'peaky' demand



### If demand is less 'peaky', in the long term less capacity is needed to supply the same amount of electricity over a period.



However, it is important not to overstate the cost savings that can be achieved. A significant proportion of our costs are fixed, at least for the foreseeable future. Similar to the stormwater example, our network capacity has already been constructed and is currently available for customers to use. However, how we use the network today will impact the level of future costs incurred.

It is also important to send reflective cost signals so that we do not discourage customers from using the existing network. We also want to make sure that any new capacity is only built if customers genuinely want it, and are prepared to pay tariffs that reflect the costs of increased capacity.

## An example – customers with embedded generation

The way that customers are using electricity networks is beginning to change dramatically. In the past, the traffic on our network was all one-way: from the hydro generators to our load customers.

Now the traffic is two-way, as some customers generate their own electricity through embedded generation such as solar panels. These changes are creating new challenges for network operation and tariff design.

While solar generation is less significant in Tasmania than other states, it is an example that highlights issues of fairness and efficiency. Solar panels definitely reduce the amount of energy delivered via the network, but in Tasmania, may not reduce peak demand on the electricity network (especially on dark winter mornings when Tasmanians turn on their heaters). They also contribute to the complexity of network operations and stability.

By making our tariffs more cost reflective, customers will benefit overall.

# Our Tariff Review



TasNetworks is currently reviewing our network tariffs to understand how they could provide better price signals for our customers. We are seeking our customers' feedback on how our network tariffs should change. This review is concerned with tariff design ('how we charge') rather than our total regulated revenue ('what we charge').

## **In thinking about tariff design, we have developed the following principles to help guide us:**

- Tariffs should facilitate the efficient recovery of revenue.
- Tariffs should be as simple as possible and developed in consultation with customers and other stakeholders.
- Tariffs should provide price signals to all customers, recognising that the costs of using the network varies at different times.
- We should calculate our tariffs according to a well-defined and clearly-explained methodology.
- We should consider the impacts of any tariff change on customers, and introduce change over a period of time to manage the impact on particular customers.
- Our tariffs must comply with the regulatory rules, both nationally and locally.

In developing our methodology, we have looked at the approach adopted by electricity distribution network companies in other states, to understand how they set network tariffs.

## **So far, our tariff review has found that:**

- Many network tariffs do not properly reflect the costs of providing the network service. For example, the uncontrolled load tariff for water heating and/or residential space heating is heavily cross-subsidised by other customers. The tariff also allows consumption at off-peak rates at all time, including genuinely peak periods.
- Our network tariffs are too heavily based on energy consumption. This pricing approach encourages customers to reduce energy consumption to save money, even at off-peak times. However, this may not result in any reduction in network costs. These costs must still be recovered, which means some customers are subsidising others.
- Large numbers of customers are responding to the 'incorrect' consumption-based price signal by installing new technology to reduce consumption, which does not necessarily reduce network costs.
- There are opportunities to improve network price signals to enable customers to make better consumption and investment decisions (which may include properly understanding the true costs and benefits of electric vehicles, solar panels, battery storage and energy efficiency measures).
- Better consumption and investment decisions produce better outcomes for everybody, and help to reduce our costs and our customers' electricity bills.



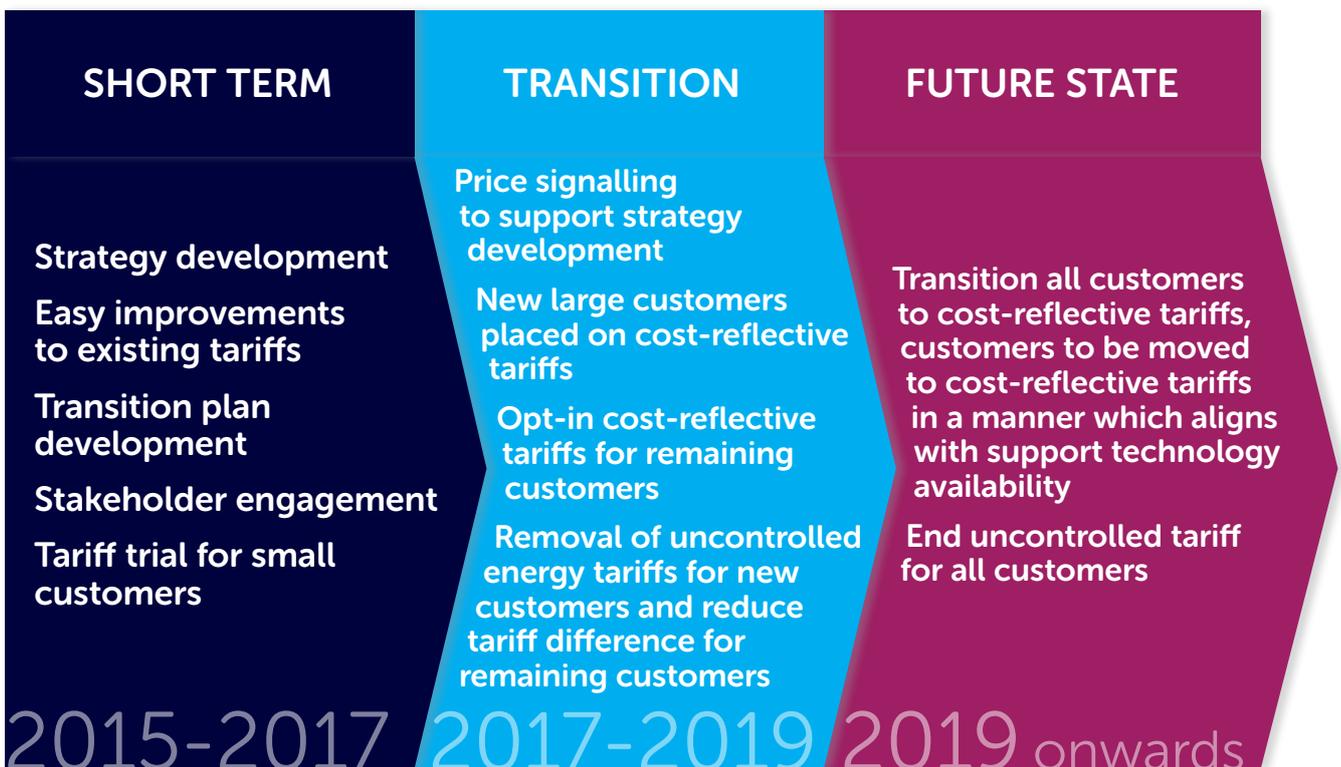
## Proposed Tariff Strategy

TasNetworks has considered a number of options for how best to improve our network tariffs.

We propose moving tariffs towards demand-based pricing rather than consumption-based pricing. We are considering a distinction between demand use at peak and off-peak periods in a way that encourages practical changes in customer behaviour. This pricing approach will also encourage greater usage in those periods where there is spare network capacity. By using existing capacity better, we can deliver more electricity without spending money to build new network capacity.

## Transition to new tariffs

It will take time to introduce demand-based pricing. The figure below shows how we intend to transition from the current state to the future state. We see the transition period as getting underway from 2017.



During the transitional phase, we will make improvements to existing tariffs. In a number of instances we will increase the fixed component and reduce the consumption-based charges.

By 2017, we plan to introduce demand-based pricing to provide more accurate price signals to our customers.

# Consultation with customers



We are seeking feedback on our tariff approach. We are particularly interested in feedback on the developed approach and what transitional issues are important to you. It is also worth noting that we have established a tariff reform working group, with members from a diverse range of organisations, such as:

The Tasmanian Small Business Council

The Tasmanian Council of Social Service (TasCOSS)

Tasmanian Renewable Energy Alliance

You may prefer to provide feedback to these member representatives who can then feed that information via TasNetworks Tariff Reform Working Group. Other feedback options include emailing [DD17@tasnetworks.com.au](mailto:DD17@tasnetworks.com.au) or visiting our website [www.tasnetworks.com.au/customer-engagement](http://www.tasnetworks.com.au/customer-engagement)





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