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Executive summary 1



1 Executive summary

Our network tariffs are a key component of our overall demand management strategy. Our aim when developing network tariffs is to reduce long-term average charges for using our network by promoting efficient network investment and utilisation. This tariff structure statement (**TSS**) sets out how we will achieve this objective for the period from 2017–2020.

Our TSS is a requirement under the National Electricity Rules (the Rules). Consistent with the Rules, it has been developed following extensive stakeholder engagement. This includes talking to customers, retailers and stakeholders across our electricity distribution area. Opportunities to participate were promoted via our Talking Electricity website and e-news, as well as directly via meetings, workshops, email and phone. Our key objective is to ensure an understanding of our proposed network tariff structures, their impacts and our approach to introducing these networks tariffs.

The key difference between our existing and proposed network tariffs is the introduction of a demand charge for our residential and small and medium enterprise customers. These demand charges will be introduced gradually. In particular, we recognise that some customers may require a period of time to understand our proposed network tariff structure, and to adapt their behaviour or implement solutions that can help manage their electricity usage. We will continue to work with all stakeholders (including Government, customers, retailers and customer groups) to ensure the transition to cost-reflective network tariffs minimises any impacts on consumers.

For our commercial and industrial customers, we do not propose to change our network tariff structures during the 2017–2020 period—a demand charge already exists for these customers. Refinements to these network tariffs, however, will be included in our 2016 pricing proposal (although a demand tariff charge will be retained).

A summary of our proposed network tariff structures for the 2017–2020 period is set out in table 1.1, table 1.2 and table 1.3. Our actual network tariffs will be determined each year through the Australian Energy Regulator's (AER) annual pricing proposal process, but must comply with the structures set out in our TSS.

¹ NER, cl. 6.8.2.

Table 1.1 Residential customers—proposed network tariff structures

Tariff	Tariff structure	Charging parameter
Residential standard and	Fixed	Supply charge reflecting a fixed amount per day
Residential bulk	Usage Anytime charge based on usage within the month	
	Demand	Maximum demand charge based on monthly maximum kilowatt demand measured: over a 30-minute period; between 3:00PM to 9:00PM (local time); work days only; and higher charge from December to March, and lower charge from April to November.
Residential non-demand	Fixed	As for residential standard tariff
	Usage	As for residential standard tariff
Residential controlled load	Usage	Charge based on controlled load usage within the month (usually between 11:00PM and 7:00AM, local time)

Notes: Work days are defined as any day of the week excluding public holidays and weekends.

Table 1.2 Small and medium enterprise customers—proposed network tariff structures

Tariff	Tariff structure	Charging parameter
Small business standard and	Fixed	Supply charge reflecting a fixed amount per day
Small business bulk	Usage	Anytime charge based on usage within the month Maximum demand charge based on monthly maximum kilowatt demand measured: over a 30-minute period; between 10:00AM to 6:00PM (local time); work days only; and higher charge from December to March, and lower charge from April to November.
	Demand	,
		 between 10:00AM to 6:00PM (local time); work days only; and higher charge from December to March, and lower charge from April
Small business non-demand	Fixed	As for small business standard tariff
	Usage	As for small business standard tariff
Unmetered supplies	Usage	As for small business standard tariff

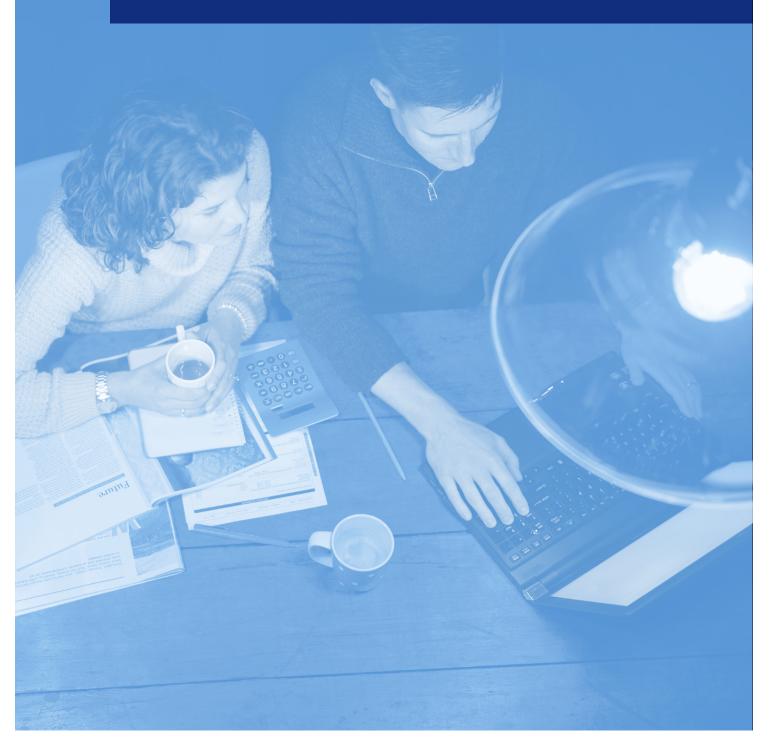
Source: CitiPower

Notes: Work days are defined as any day of the week excluding public holidays and weekends.

Table 1.3 Commercial and industrial customers—proposed network tariff structures

Tariff	Tariff structure	Charging parameter	
Large low voltage and	Fixed	Supply charge reflecting a fixed amount per day	
Large low voltage bulk	Usage (peak)	Charge based on usage between 7:00AM and 11:00PM	
	Usage (off-peak)	Charge based on usage between 11:00PM and 7:00AM	
	Demand	Maximum demand charge based on 12-month rolling maximum kVA demand over a 15/30-minute period, calculated on a monthly basis	
High voltage	Fixed	As for large low voltage tariff	
	Usage (peak)	As for large low voltage tariff	
	Usage (off-peak)	As for large low voltage tariff	
	Demand	As for large low voltage tariff	
Sub-transmission	Fixed	As for large low voltage tariff	
	Usage (peak)	As for large low voltage tariff	
	Usage (off-peak)	As for large low voltage tariff	
	Demand	As for large low voltage tariff	

Our business and changing network tariff structures



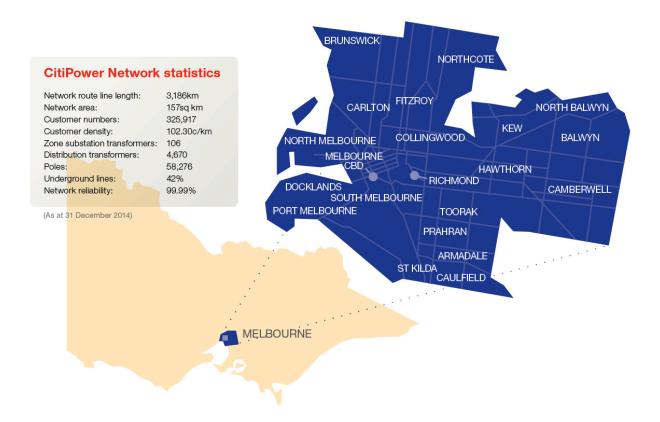
2 Our business and changing network tariff structures

This chapter of our TSS provides background information on our network, and sets out why the structures of our existing network tariffs need to change.

2.1 Who we are and our responsibility

We are one of the most efficient and reliable electricity distribution networks in Australia. As one of Victoria's five privately owned electricity distributors, we own and manage assets that deliver electricity to more than 325,000 homes and businesses across Melbourne's central business district and inner suburbs. This area includes some of Australia's most iconic sporting and cultural facilities, such as the Melbourne Cricket Ground, the National Tennis Centre and the Victorian Arts Centre.

Figure 2.1 Our distribution network area



Source: CitiPower

We are responsible for maintaining distribution network safety and reliability, along with planning and designing network extensions and upgrades to meet our customers' current and future electricity needs. We also operate the network on a day-to-day basis, connect new customers (large and small) to our network, and provide metering services.

2.2 Delivering affordable pricing outcomes

As a regulated business, the distribution revenue we are allowed to recover from our customers is determined by the Australian Energy Regulator (AER) on a five yearly basis. The regulatory determination process for the 2016–2020 regulatory control period is currently underway.

Each year, we also submit an annual pricing proposal to the AER. The purpose of these pricing proposals is to obtain approval for how we recover our distribution revenue allowance, transmission costs and other government policy charges in any given year.

Our customers currently pay the lowest network charges in Australia, and Victorians pay the lowest network charges in the country. These network charges cover the cost of transporting electricity from the generator through the transmission and distribution networks to our customers' homes or businesses. Metering charges cover the cost of the meter and meter data services.

We pass network and metering charges onto electricity retailers, who pass them onto our customers via electricity bills. In general, the electricity bill customers receive from their retailer does not distinguish between network, metering and other charges.

2.3 Why we are changing our network tariff structures

Our existing network tariffs are based on the three customer types—residential; small and medium enterprises (**SME**); and commercial and industrial. Within these customer types, we offer several network tariffs that reflect factors such as the usage profile of a customer group, as well as the type of connection.

For residential and SME customers, the structure of our existing network tariffs typically include a fixed daily charge and an energy usage component (which may vary depending on the time of day). As shown in figure 2.2, these network tariff structures result in our customer bills being driven predominantly by energy usage.

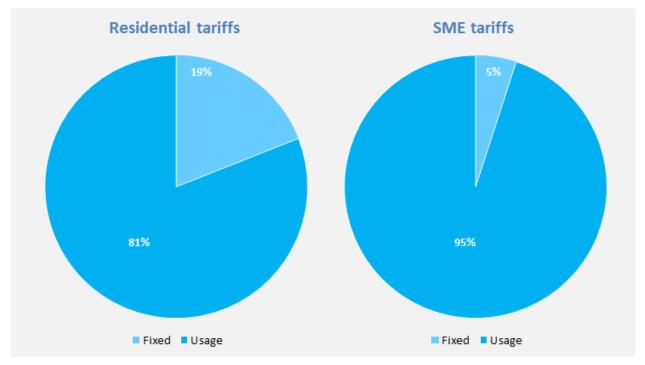


Figure 2.2 Composition of charges for our existing residential and SME network tariff structures

Source: CitiPower

Although our existing residential and SME network tariffs are largely usage based, the predominant driver of our network costs is meeting the maximum demand on our network at any given time. For example, our network must be built to accommodate maximum demand, notwithstanding that this maximum demand only occurs for a small period of time each year. As shown in figure 2.3, maximum (or peak) demand growth is forecast to vary across our network.

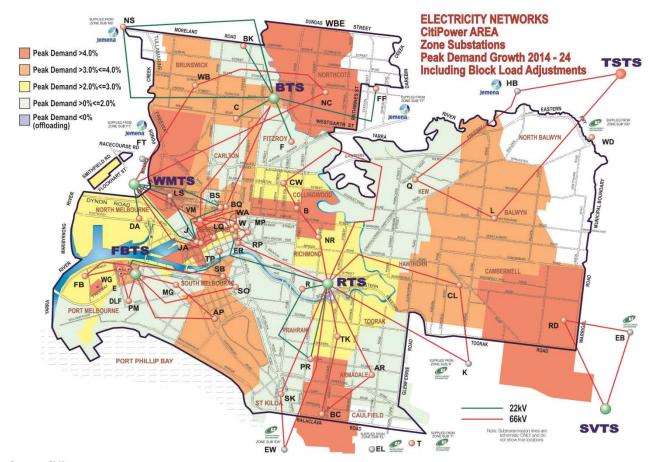


Figure 2.3 Forecast maximum demand growth (2014–2024)

Energy usage and demand, however, may not be correlated (as shown in figure 2.4). Our existing network tariff structure, therefore, creates a disconnect between the drivers of our costs and how we charge our customers.

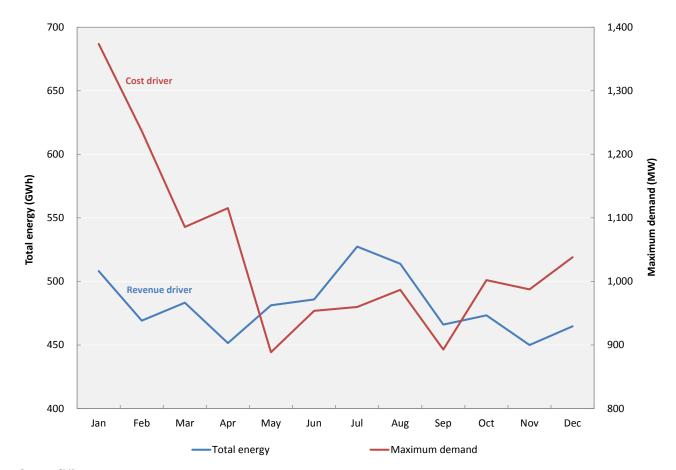


Figure 2.4 Energy consumption relative to maximum demand

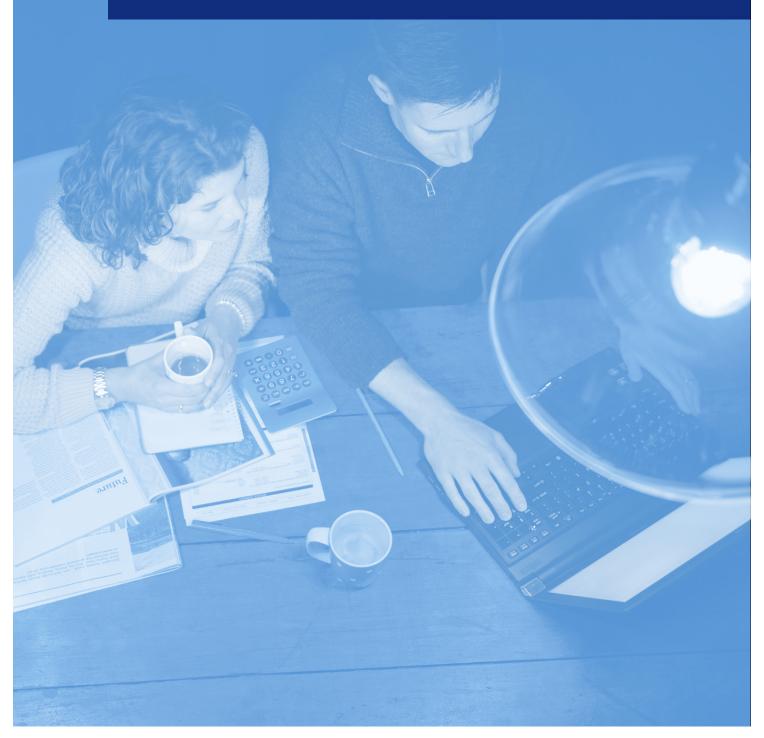
The disconnect between our cost drivers and our network tariffs is a key reason for changing our network tariff structures to be more cost-reflective. Cost-reflective network tariffs will encourage our customers to shift their usage from times when our network is near full capacity. This is expected to avoid or defer future network investment which will result in lower future network tariffs. For example, cost-reflective network tariffs can encourage the following:

- changing consumer behaviour during periods of maximum demand, such as not using washing machines and dryers at the same time during these periods;
- innovative demand management products, such as cycling of air-conditioners; and
- embedded generation and/or energy storage where cost-effective.

As set out in this TSS, we are also moving towards simplifying our network tariffs by consolidating the number of network tariffs we offer.

Further, we will be subject to a revenue cap for the 2016–2020 regulatory control period. As a consequence, changing our network tariff structure will not change the total revenue will can recover through this period. Network tariffs, however, can change consumption behaviour which affects future investment in our network—future investment affects the amount of revenue we will need to recover in future regulatory control periods.

Our customer, retailer and stakeholder engagement



3 Our customer, retailer and stakeholder engagement

Engagement is core to the strategic priorities of our business. We regularly consult and seek feedback to help us shape our future plans and business decisions.

In 2013 we commenced our stakeholder engagement program for the 2016–2020 regulatory control period. We undertook a research phase which found almost 80 per cent of our customers did not know who we were, what our role was or what services we provide. We responded by launching www.talkingelectricity.com.au and delivering information to each of our customers via a mail out.

In 2014 we began engaging our customers around network tariff reform. We reached out to our customers via focus groups, online surveys and our publications.

In 2015 we used a range of consultation mechanisms to give our customers, retailers and stakeholders the opportunity to have their say on our proposed changes to network tariff structures. We held face-to-face meetings and forums, engaged an independent market research company to deliver us insights, and communicated with our customers, retailers and stakeholders via our Talking Electricity website and e-news.

Our engagement program is discussed in detail in appendix D.

3.1 Key insights from our customer, retailer and stakeholder engagement

The feedback we gathered from our customer, retailer and stakeholder engagement has helped to shape our proposed cost-reflective tariffs structure for the 2017–2020 period. The key insights from this process are set out in figure 3.1

Figure 3.1 Key insights from our stakeholder engagement program



3.1.1 2014 engagement approach

The engagement activities we undertook in 2014, and the feedback we received from these activities are set out in figure 3.2.

Figure 3.2 Engagement activities and insight (2014)

What we did in 2014

Our engagement activities included:

- An online customer survey run by Colmar Brunton
- An online customer survey run by Nature Research and Deloitte Access Economics
- Residential customer focus groups conducted by Colmar Brunton
- Small to medium business and large electricity user interviews conducted by Colmar Brunton
- Feedback prompts in our Directions and Priorities Consultation Paper.

2014

What you told us about...

The current tariff structure

- Limited in its ability to reduce peak demand, incentivise energy efficiency and reduce power at critical periods
- It is unfair and results in consumers paying more
- Not economical to have a flat rate
- Too confusing.

Consumption based tariffs

- There is little appetite to pay more for additional build on the network to support higher peak period usage
- Unwilling to change consumption behaviour to reduce network demand during high peak periods.

Location based tariffs

- Residential customers and small to medium businesses are willing to spread the cost so those in areas that need additional upgrades are not faced with higher power bills
- Large electricity users said they lack social equity, disadvantage those in remote areas and present difficulties in stable cost forecasting.

Proposed introduction of a maximum demand tariff

- Help incentivise and affect the adoption of technologies to assist with the smart and efficient use of energy
- Must be transparent, well understood by customers and accompanied by an effective communication and engagement campaign
- Customers will not have to subsidise others who use large amounts of electricity.

We also asked you about...

Critical peak rebates if electricity usage is reduced on the hottest days of the year

- A majority of residential customers supported this rebate
- The top two preferred options for residential customers were to turn off their washing machine or air conditioner during the peak period.

Rebates for residential customers if they allow an electricity provider to remotely control appliances on the hottest days of the year

- The majority of customers said they like to be in control of their own electricity usage
- Customers with pool pumps supported a rebate for an electricity provider to remotely control them
- There was limited support for an electricity provider to remotely control air conditioners.

3.1.2 2015 engagement approach

The engagement activities we undertook in 2015, and the feedback we received from these activities are set out in figure 3.3.

Figure 3.3 Engagement activities and insight (2015)



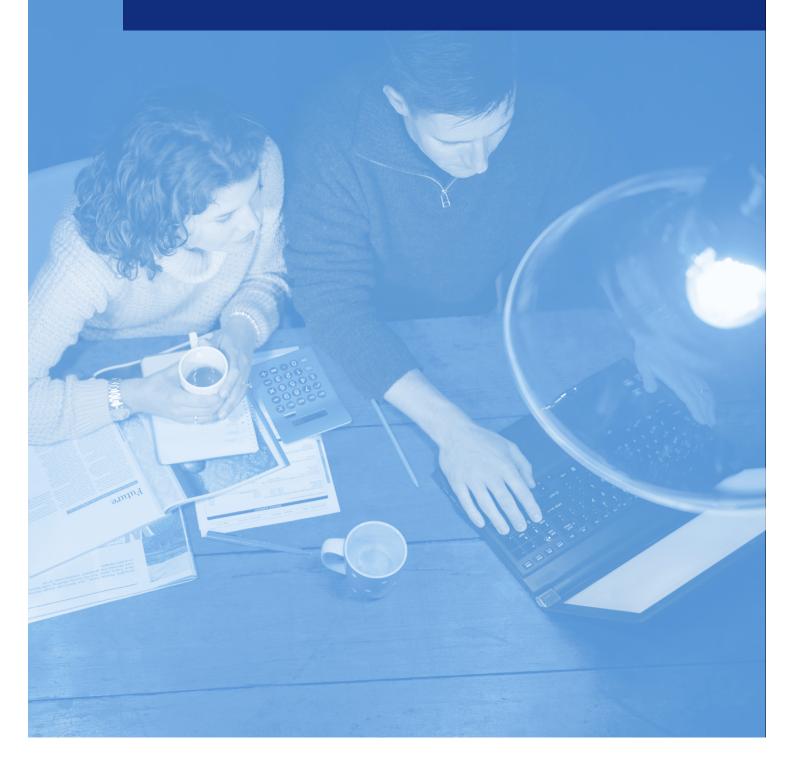
3.2 How we responded to your feedback

The feedback we received from our customers, retailers and stakeholders has informed a number of key components of our proposed network tariff structures. These components are discussed in greater detail in section 4 of our TSS, and include the following:

- we have aligned key elements of our proposed residential network tariff structure with the other Victorian distributors;
- we have proposed a narrow maximum demand period for residential and SME customers;
- our maximum demand charge will only apply on weekdays, not on weekends and public holidays;
- we will transition our customers to our proposed cost-reflective tariff structure;
- residential customers may opt-out of our demand charge in the first 12 months (i.e. 2017) and continue on a residential non-demand tariff until the end of 2020; and
- we are not introducing location based tariffs or rebates as part of our proposed cost-reflective tariff structure.

We will also continue to work with the other Victorian distribution companies to ensure communication with our customers, retailers and stakeholders is clear and consistent throughout the network tariff reform process.

Our proposed network tariffs



4 Our proposed network tariffs

Our proposed network tariffs have been developed to be consistent with the network pricing objective set out in the Rules. ² This chapter sets out the overall structure of our proposed network tariffs, including the following:

- our proposed network tariff classes;
- our proposed network tariff structures and the charging parameters for each network tariff; and
- other factors relevant to establishing our proposed network tariffs.

We aim to introduce these network tariffs following a transition period (which is discussed in the next chapter).

Our customers will continue to be charged a fixed fee for metering services.

4.1 Our proposed network tariff classes

Our network tariffs allow us to recover the revenue we require to provide an efficient, reliable and safe electricity network. This revenue is determined by the AER every five years—the forthcoming period relevant to this TSS being the 2016–2020 regulatory control period.

To recover the revenue determined by the AER, we first group our customers into network tariff classes. Grouping our customers into network tariff classes ensures that customers with similar characteristics and similar demands on our network pay similar prices. For example, our network tariff classes are grouped based on characteristics that are key drivers of our costs of providing network services, including:

- the nature and extent of usage of different types of customers; and
- the nature of connection to the network, including the capacity, location or voltage of connection.

Our network tariff classes are also aggregated to minimise the transaction costs that may arise (to us as well as retailers) from providing further disaggregation. This includes transaction costs associated with developing billing systems and processes to assign customers to alternative network tariff classes.

For the 2016–2020 regulatory control period, we propose to group our customers into one of the network tariff classes set out in table 4.1. These classes are identical to our existing network tariff classes.

Table 4.1 Customer types and network tariff classes

Customer type	Network tariff class	
Residential	Low voltage residential	
Small and medium enterprises	Low voltage business (including unmetered supplies)	
Commercial and industrial	Large low voltage business	
	High voltage business	
	Sub-transmission	

Source: CitiPower

Notes: Customers are assigned to a given network tariff class in accordance with our network tariff assignment policy (appendix E).

² NER, cl. 6.18.5(a).

4.2 Our proposed network tariff structures and charging parameters

Within each network tariff class we offer a number of different network tariffs. The structure of each of these network tariffs is the same for our residential and SME customers, and typically comprises a combination of the following three components:

- fixed charge;
- usage charge; and
- · demand charge.

The key difference between our existing and proposed network tariffs for residential and SME customers is the introduction of a demand charge.³ We discuss the implementation of demand charges, and the specific network tariffs and charging parameters for each customer category below.

As we are subject to a revenue cap for the 2016–2020 regulatory control period, the introduction of our demand charges will be offset by a corresponding reduction in our usage charges. This is demonstrated for existing residential customers in figure 4.1 and existing SME customers in figure 4.2.

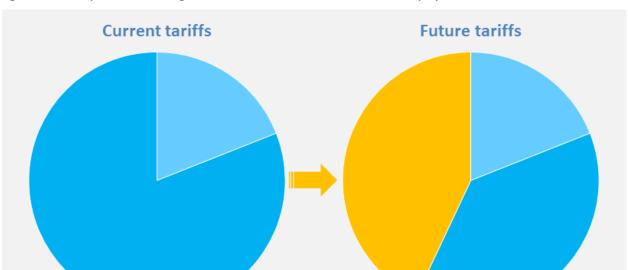


Figure 4.1 Composition of existing residential network tariff structure relative to proposed network tariff structure

Source: CitiPower

Notes: These network tariff compositions are based on equivalent total revenues, and are indicative only. To the extent our total revenue amount changes during the AER's regulatory determination process for the 2016–2020 regulatory control period, the usage component of our future network tariffs will be adjusted.

Usage

Demand

Fixed

Our existing commercial and industrial tariffs already include a demand charge.

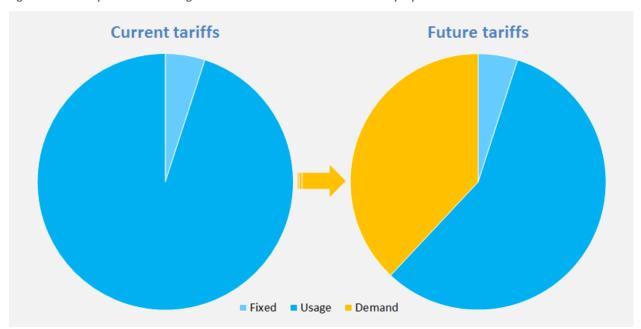


Figure 4.2 Composition of existing SME network tariff structure relative to proposed network tariff structure

Notes: These network tariff compositions are based on equivalent total revenues, and are indicative only. To the extent our total revenue amount changes during the AER's regulatory determination process for the 2016–2020 regulatory control period, the usage component of our future network tariffs will be adjusted.

4.3 Introduction of demand charges for residential and SME customers

A key driver of our network costs is meeting maximum demand. Our network must be built to accommodate maximum demand, even though this level of demand only occurs for small periods of time each year. Currently, 10 per cent of our network is used on less than two days per year.

The introduction of a demand charge for our residential and SME customers will encourage them to manage their energy usage during particular periods. Lowering maximum demand is expected to reduce future infrastructure requirements, and therefore lower future costs for all users.

As a starting point for introducing a demand charge, we first had regard to the actual usage data of all our customers to better understand the characteristics of our network. This data was available through our advanced metering infrastructure. We also had regard to the feedback provided during our stakeholder engagement process. Based on the characteristics of our network, and feedback from our stakeholders, we propose the demand charging parameters shown in table 4.2:

Table 4.2 Demand charges for residential, and SME customers

Customer type	High charge period	Low charge period	Day	Time
Residential	December to March	April to November	Work days only	3.00PM to 9.00PM
SME	December to March	April to November	Work days only	10.00AM to 6.00PM

Source: CitiPower

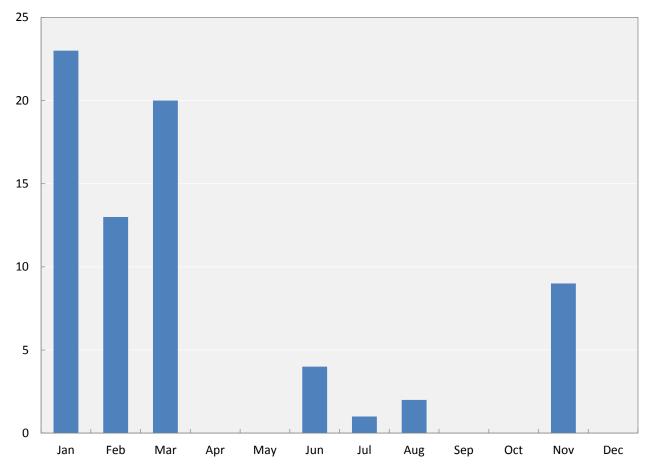
Notes: Work days are defined as any day of the week excluding public holidays and weekends.

The drivers for each component of our demand charge are discussed below.

4.3.1 Charging period: months of the year

To determine when throughout the year we should provide a demand signal, we reviewed our demand data at both the terminal station and zone substation level. As shown in figure 4.3 and figure 4.4, this allowed us to better understand which months contribute to our maximum demand.

Figure 4.3 Terminal stations: number of annual maximum demand observations by month (2007–2014)



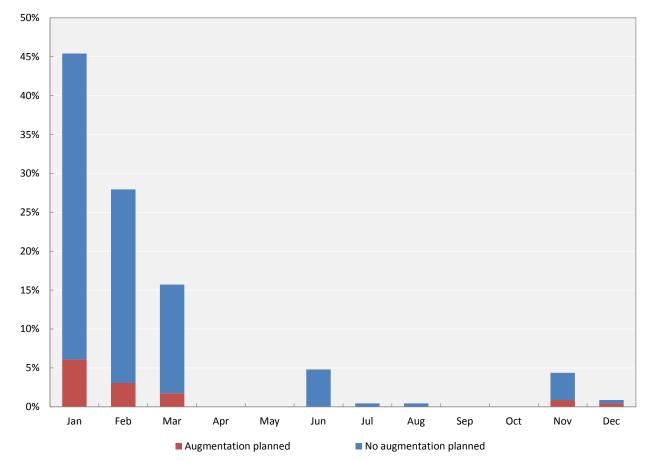


Figure 4.4 Zone substations: proportion of annual maximum demand events by month (2009–2014)

Notes: Planned augmentation is within the next 10 year period

Our network demand typically peaks during the warmer months of the year, from November through to March. For the following reasons, however, our proposed approach is to apply a high period demand charge from December to March and a low period demand charge from April to November:⁴

- applying demand charges throughout the entire year allows us to manage the customer impacts that may
 otherwise occur if our demand component was only recovered during a narrow window—these impacts are
 shown in the difference in revenue profiles based on our current and proposed network tariffs, shown in
 figure 4.5; and
- our proposed demand charging periods match those proposed by the other Victorian distributors—retailers
 and consumer representatives stated that consistency across all distributors will assist in minimising
 transaction costs on all parties (particularly regarding billing systems), and help retail customers understand
 our network tariff structures.

NEN, Cl. 0.10.5(1)—(1)

⁴ NER, cl. 6.18.5(f)–(i).

Residential Small and medium enterprise

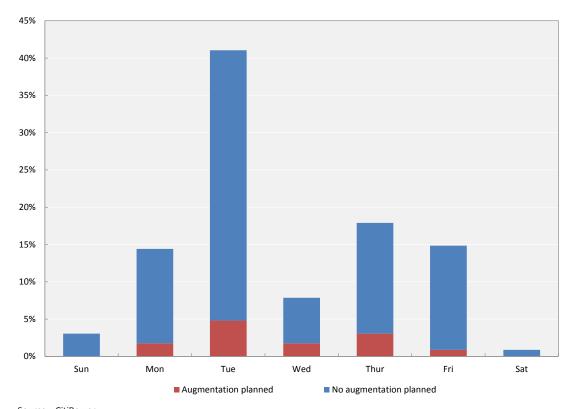
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Figure 4.5 Indicative residential revenue profile

4.3.2 Measurement period: day of the week

We also considered the demand profile of our network throughout the week to determine whether our demand signal should apply only on specific days. Maximum demand on our network is largely driven by commercial and industrial loads. As shown in figure 4.6, maximum demand typically occurs on work days.





Source: CitiPower

Notes: Planned augmentation is within the next 10 year period

Our stakeholders supported measuring demand over as narrow a period as possible, as this would provide customers with greater ability to manage any possible price impacts due to changes in our network tariffs. As outlined previously, a further theme from retailers and consumer representatives was that consistency across all distributors will assist in minimising transaction costs on all parties (particularly regarding billing systems), and help retail customers understand our network tariff structures. For these reasons, we propose to measure our demand charge only during work days (i.e. any day of the week, excluding public holidays and weekends).

4.3.3 Measurement period: time of day

In order to provide a demand signal that effectively encourages customers to manage their energy usage during particular periods, it is important the time of day over which our demand charge is measured captures the maximum daily demand on our network. Figure 4.7 demonstrates these peaks as the aggregation of the demand for all of our customers on a particular hot summer and cold winter day.

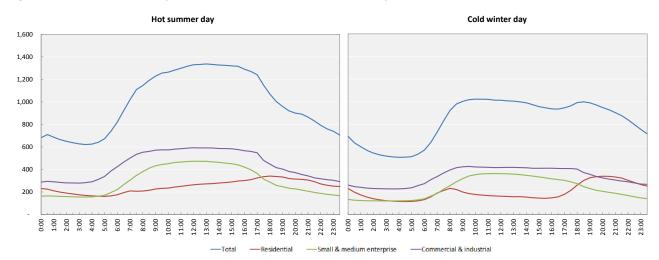


Figure 4.7 Network demand profile for a hot summer and cold winter day (MW)

Source: CitiPower

Further, figure 4.8 and figure 4.9 show the distribution of daily maximum demand at both the terminal station and zone substation level.

⁵ NER, cl. 6.18.5(h)(3).

⁶ NER, cl. 6.18.5(f); and NER, cl. 6.18.5(i).

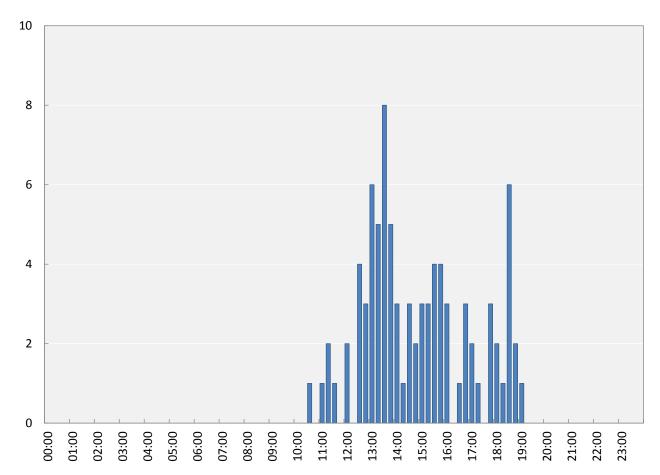


Figure 4.8 Terminal stations: number of annual maximum demand observations by time of day (2007–2014)

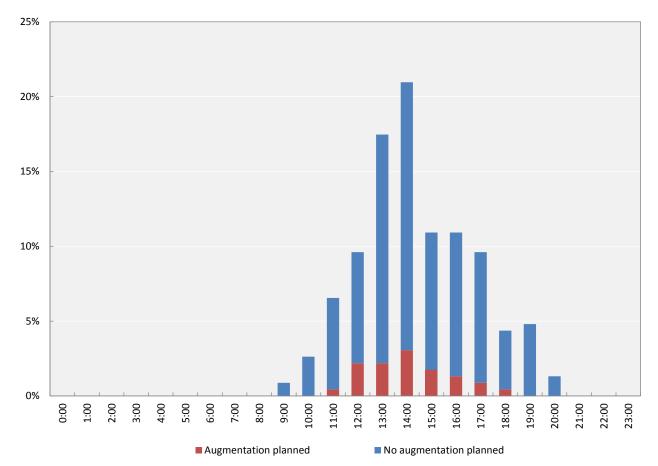


Figure 4.9 Zone substations: proportion of annual maximum demand events by time of day (2009–2014)

Notes: Planned augmentation is within the next 10 year period

Our proposed approach is to measure demand between 3:00PM to 9:00PM (local time) for residential customers, and between 10:00AM to 6:00PM (local time) for small and medium enterprise customers. These periods reasonably reflect the timing of maximum demand on our network. These periods also reflect the feedback provided during our stakeholder engagement process—our stakeholders supported measuring demand over as narrow a period as possible, and stated a preference for consistency across all distributors (to assist in minimising transaction costs on all parties, and to help retail customers understand our network tariff structures).

4.3.4 Other demand factors

Our analysis on the impact of demand on our network also considered whether the signal to encourage customers to manage their energy usage during particular periods should differ depending on the location of a customer within our network. For example, as shown in section 2.3, maximum (or peak) demand growth is forecast to vary across our network.

For the following reasons, however, we do not propose to apply locational pricing for the purpose of this TSS:

• our network is reasonably interconnected and long-run marginal costs, therefore, are relatively uniform across our network;

- the impact on customer bills is likely to be material in certain locations, and those customers may have limited ability to mitigate the impact of these changes through their usage decisions;
- · locational pricing introduces additional complexity to network tariffs; and
- in these initial stages of network tariff reform our long-run marginal cost modelling and customer understanding of network tariff reform is not yet sufficiently mature.

4.4 Residential network tariffs and charging parameters

Following a period of transition, we plan to offer four residential tariffs. These network tariffs, and the eligibility criteria for these network tariffs is set out in table 4.3:

Table 4.3 Eligibility for residential tariffs

Network tariff	Eligibility	
Residential standard	Default network tariff for most residential customers Remotely read interval meter	
Residential bulk	 Default network tariff for residential customers supplied directly from on-site substation terming where there are no distribution assets beyond the substation Remotely read interval meter 	
Residential non-demand	 Default network tariff for residential customers who do not have a remotely read interval meter installed Customers may opt-in to this network tariff (from our residential standard tariff) during 2017 	
Residential controlled load	 Default network tariff for controlled hot water and slab heating usage Customers must be on one of the other three network tariffs for their general usage Single phase connection (for new customers) 	

Source: CitiPower

Notes: We may also offer some form of critical peak price or rebate trials during the period from 2017–2020, which may be location based. These trials would be supported by our new billing system (which was included in our 2016–2020 regulatory proposal).

The above network tariffs represent a consolidation of our existing 12 residential network tariffs. The consolidation of these network tariffs is important for ensuring each network tariff is reasonably capable of being understood by our customers. The consolidation of our network tariffs also minimises the transaction costs on all parties. This is consistent with the feedback received during our stakeholder engagement process.

The charging parameters for our proposed residential network tariffs are set out in table 4.4.

⁷ NER, cl. 6.18.5(i).

Table 4.4 Residential network tariff structures and charging parameters

Network tariff	Components	Measurement	Charging parameter
Residential standard and	Fixed	c/day	Supply charge reflecting a fixed amount per day
Residential bulk	Usage	c/kWh	Anytime charge based on usage within the month
	Demand	c/kW/day	Maximum demand charge based on monthly maximum kilowatt demand, measured: over a 30-minute period; between 3:00PM to 9:00PM (local time); work days only; and higher charge from December to March, and lower charge from April to November.
Residential non-demand	Fixed	c/day	As for residential standard tariff
	Usage	c/kWh	As for residential standard tariff
Residential controlled load	Usage	c/kWh	Charge based on controlled usage within the month (usually between 11:00PM and 7:00AM, local time)

Notes: Work days are defined as any day of the week excluding public holidays and weekends.

4.5 Small and medium enterprise network tariffs and charging parameters

Following a period of transition, we plan to offer four different SME network tariffs. These network tariffs, and the eligibility for these network tariffs is set out in table 4.5:

Table 4.5 Eligibility for SME network tariffs

Network tariff	Eligibility
Small business standard	Default network tariff for non-residential customers Usage per year is less than or equal to 160 MWh
Small business bulk	 Default network tariff for non-residential customer supplied directly from on-site substation terminals where there are no distribution assets beyond the substation Usage per year is less than or equal to 160 MWh
Small business non-demand	Default network tariff for non-residential customers who do not have a remotely read interval meter installed
Unmetered supplies	Customers with an approved unmetered load

Source: CitiPower

Notes: We may also offer some form of critical peak price or rebate trials during the period from 2017–2020, which may be location based. These trials would be supported by our new billing system (which was included in our 2016–2020 regulatory proposal).

Similar to our approach for residential customers, we have consolidated the number of SME network tariffs. Consistent with the feedback received during our stakeholder engagement process, we consider this simplification will assist in minimising transaction costs on all parties.

The charging parameters for our proposed SME network tariffs are set out in table 4.6.

Table 4.6 Small and medium enterprise network tariff structures and charging parameters

Network tariff	Components	Measurement	Charging parameter
Small business standard and	Fixed	c/day	Supply charge reflecting a fixed amount per day
Small business bulk	Usage	c/kWh	Anytime charge based on usage within the month
	Demand	c/kW/day	Maximum demand charge based on monthly maximum kilowatt demand, measured:
			 over a 30-minute period; between 10:00AM to 6:00PM (local time); workdays only; and higher charge from December to March, and lower charge from April to November.
Small business non-demand	Fixed	c/day	As for small business standard tariff
	Usage	c/kWh	As for small business standard tariff
Unmetered supplies	Usage	c/kWh	As for small business standard tariff

Notes: Work days are defined as any day of the week excluding public holidays and weekends.

4.6 Commercial and industrial network tariffs and charging parameters

We plan to offer three commercial and industrial tariffs. These network tariffs, and the eligibility criteria for these network tariffs is set out in table 4.7:

Table 4.7 Eligibility for commercial and industrial tariffs

Network tariff	Eligibility
Large low voltage	Supply capacity is greater than or equal to 120 kW Supply voltage is less than 1 kV
Large low voltage bulk	 Supply capacity is greater than or equal to 120 kW Supply voltage is less than 1 kV Non-residential customer supplied directly from on-site substation terminals where there are no distribution assets beyond the substation
High voltage	Supply voltage is greater than 1 kV and less than or equal to 22 kV
Sub-transmission	Supply voltage is 22 kV or 66 kV

Source: CitiPower

Our existing commercial and industrial network tariffs already include usage and demand components. There is no specified measurement period for the demand component, as the non-coincident maximum demand of a large customer can be material for the capacity of network assets supplying that customer. Refinements to these network tariffs will be included in our 2016 pricing proposal (although a demand tariff charge will be retained).

We may also trial some form of coincident maximum demand signal for our commercial and industrial customers during the period from 2017–2020. This may take the form of critical peak price or critical peak rebate trials, and may be location based. Our existing IT systems do not support critical peak prices or rebates, but we have proposed a new billing and customer relationship management system in our 2016–2020 regulatory proposal (which could provide this functionality).

The charging parameters for our commercial and industrial network tariffs are set out in table 4.8.

Table 4.8 Commercial and industrial network tariff structures and charging parameters

Network tariff	Components	Measurement	Charging parameter
Large low voltage and	Fixed	c/day	Supply charge reflecting a fixed amount per day
Large low voltage bulk	Usage (peak)	c/kWh	Charge based on usage between 7:00AM and 11:00PM
	Usage (off-peak)	c/kWh	Charge based on usage between 11:00PM and 7:00AM
	Demand	c/kVA/day	Maximum demand charge based on 12-month rolling maximum kVA demand over a 15/30-minute period, calculated on a monthly basis
High voltage	Fixed	c/day	As for large low voltage tariff
	Usage (peak)	c/kWh	As for large low voltage tariff
	Usage (off-peak)	c/kWh	As for large low voltage tariff
	Demand	c/kVA/day	As for large low voltage tariff
Sub-transmission	Fixed	c/day	As for large low voltage tariff
	Usage (peak)	c/kWh	As for large low voltage tariff
	Usage (off-peak)	c/kWh	As for large low voltage tariff
	Demand	c/kVA/day	As for large low voltage tariff

Source: CitiPower

4.7 Other factors relevant to establishing our proposed network tariffs

In section 4.2 and 4.3 we set out how the demand components of our network tariff structures were developed having regard to the impact of changing network tariffs on our customers. This included, for example, the extent to which our customers can mitigate the impact of changes through their usage decisions, and their ability to understand particular network tariffs. The ability for customers to respond to changing network tariffs is further reflected in our transition strategy.

Several other factors are also important for how our network tariffs are determined. These include the following Rules requirements:

- the revenue expected to be recovered from our customers, for each network tariff class, must lie between the stand-alone costs of serving customers who belong to that class and the avoidable costs of not serving those customers; and
- each network tariff must be based on the long run marginal cost (LRMC) of providing our service.

Our approach to calculating stand-alone and avoidable costs is set out in appendix B. Each year our annual pricing proposal will demonstrate that the revenue expected to be recovered from our customers, for each

⁸ NER, cl. 6.18.5(e).

⁹ NER, cl. 6.18.5(f).

network tariff class, lies between the stand-alone costs of serving customers who belong to that class and the avoidable costs of not serving those customers.

Appendix B also sets out our approach to calculating LRMC. Specifically, we used an average incremental cost approach to calculate LRMC for different voltage levels in our network. Our calculated LRMC, however, is sensitive to both the calculation method and the inputs used. Given this sensitivity, we have adopted a cautious approach and set our demand charges for residential and SME customers below the level implied by our calculated LRMC.

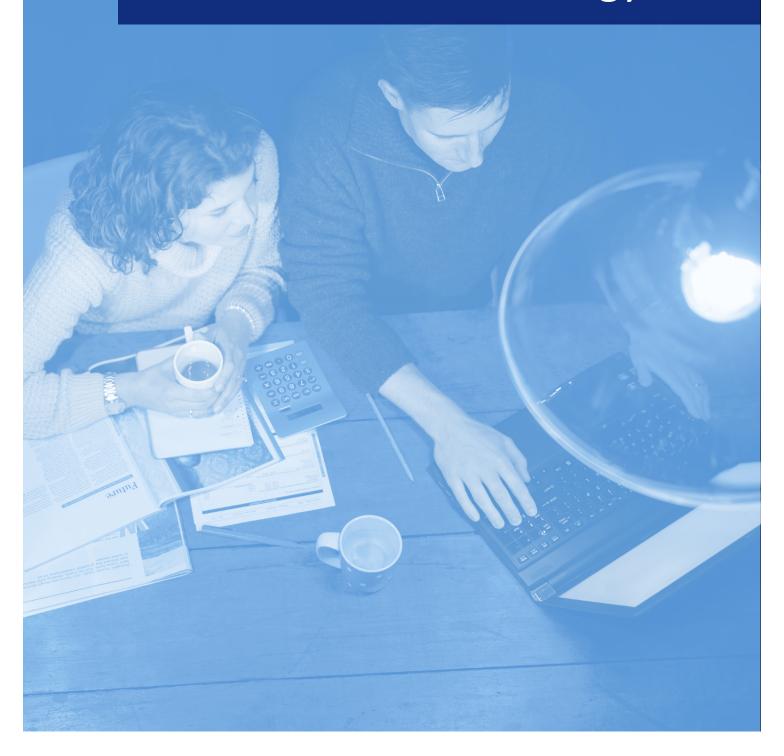
Our placeholder network charges for the 2017–2020 TSS period are set out in the indicative pricing schedule, included in appendix C. Our placeholder charges have been set to collect the same amount of forecast revenue each year. The actual level of our charges will depend on the AER's final determination on distribution revenue (due by 30 April 2016), any future pass-through or contingent projects, changes in service performance rewards and/or penalties, changes in inflation, changes in transmission costs and changes in feed-in tariff costs.

4.8 Alternative control services

Alternative control services include our ancillary network services, public lighting, and metering services. These services can be attributed to a particular customer (rather than shared across our entire customer base).

Our approach to determining our alternative control service charges is detailed in our regulatory proposal for the 2016–2020 regulatory control period. Our proposed alternative control service charges for the 2017–2020 TSS period are set out in the indicative pricing schedule, included in appendix C. The AER will make a final determination on these charges by 30 April 2016 (the determination will only specify the revenue cap for metering services).

Our proposed 5 transition strategy



5 Our proposed transition strategy

The introduction of cost-reflective network tariffs is in the long-term interests of consumers, as it can assist in reducing long-term average network tariffs. We recognise, however, that some customers may require a period of time to understand our proposed network tariffs, and to adapt their behaviour or implement solutions that can help manage their demand. This is particularly the case where customers cannot choose the network tariff to which they are assigned.

As part of our network tariff reform process, we considered the impacts of our proposed network tariffs on different customer groups. This informed the development of our proposed network tariffs, as well as our strategy to transition to these proposed network tariffs. We will continue to work with all stakeholders (including Government, customers, retailers and customer groups) to ensure this transition minimises any impacts on consumers.

It was evident from our analysis that changes to our network tariff structure will impact individual customers in different ways. We were unable to identify any specific demographic group of customers that would be materially better or worse off under network tariff reform. Rather, customer impacts depend on the nature of a customers demand profile.

5.1 Transitioning residential, and SME customers

Our stakeholders supported customers being provided with time to understand our proposed network tariffs, and to adapt their behaviour or implement solutions that can help manage their demand. Specifically, we propose the following transition strategy to our proposed network tariffs, commencing from 1 January 2017:

- demand charges will be introduced gradually over a four year period from 2017 to 2020, with a corresponding reduction in our usage charge component;
- existing residential customers will have the option to opt-out of our proposed network tariffs and revert to a non-demand network tariff in the first 12 months (i.e. during 2017), and stay on this tariff until 2020;
- existing residential customers will have the option to opt-in to a cost-reflective network tariff from 1 January 2017; and
- new customers will be immediately assigned to a cost-reflective network tariff from 1 January 2017.

These transition components are discussed in greater detail below.

5.1.1 Gradual introduction of demand charges

Ensuring customers understand our proposed network tariffs, and encouraging them to respond to these price signals, will take time. This reflects the complex nature of network tariffs, as well as investment decisions that customers may have committed to already. Further, we recognise that customers may have limited choice regarding the particular network tariff to which they are assigned. ¹⁰

Given the above, we propose to gradually introduce demand charges over a four year period from 2017 to 2020. As shown in figure 5.1 our demand charge component may commence at 20 per cent of its final value. This will increase each year until the full demand charge is applicable from 1 January 2021. This will be offset by a corresponding reduction in our usage charges. ¹¹

cannot change due to our tariff structure.

¹⁰ NER, cl. 6.18.5(h)(2).

¹¹ As we are subject to a revenue cap for the 2016–2020 regulatory control period, the total revenue we can recover through this period

It should be noted, however, that our revised TSS will be amended to take into account the AER's preliminary determination for the 2016–2020 regulatory control period. For example, dependent on the revenue profile set out in the AER's preliminary determination we may consider introducing the demand charge (in 2017) at a greater per cent of its final value.

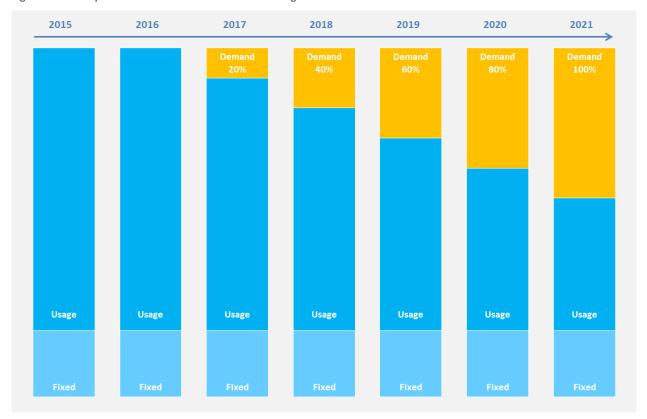


Figure 5.1 Proposed introduction of our demand charge

Source: CitiPower

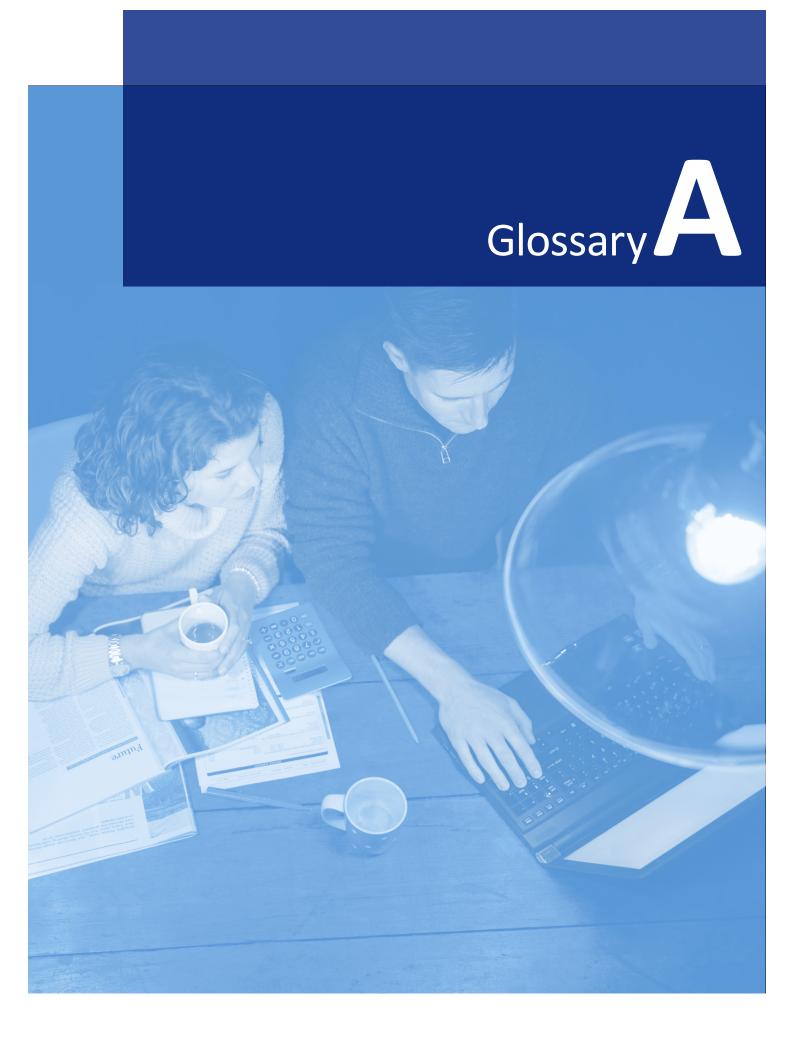
5.1.2 Opt-in versus opt-out

It may be challenging to achieve the full benefits of network tariff reform using opt-in network tariff structures. This was evident with the recent introduction of opt-in and opt-out flexible tariffs, where less than 0.3 per cent of our customers voluntarily opted-in to our flexible network tariff option. However, to ensure our customers are able to mitigate the impact of changes in network tariffs through their usage decisions, our proposed transition strategy will also include the following:

existing customers may opt-out of our demand charge in the first 12 months (i.e. 2017) and remain opted out until the end of the 2017–2020 TSS period. The alternative network tariff option for these customers will be our residential non-demand tariff.¹² To encourage the adoption of cost-reflective network tariffs, the non-demand network tariff will be costed such that 95 per cent of customers who select this network tariff will be worse off;

¹² For clarity, customers who do not have a remotely read interval meter installed will also be assigned to this non-demand tariff.

- new customers will be assigned to our full demand charge immediately. This will encourage new customers to have regard to their expected demand when making investment decisions; and
- any customer may opt-in to our full demand charge at any time during the period of this TSS. This will allow customers to achieve the full benefits of our cost-reflective network tariffs as soon as possible.



A Glossary

Table A.1 Glossary of terms

Term	Definition
AER	Australian Energy Regulator
AIC	Average incremental cost
ссс	Consumer Consultative Committee
CUAC	Consumer Utilities Advocacy Centre
DUoS	Distribution use of system
ESV	Energy Safe Victoria
EWOV	Energy and Water Ombudsman
kV	Kilovolt
kVA	Kilovolt amperes
kW	Kilowatt
kWh	Kilowatt hour
GWh	Gigawatt hour
Law	National Electricity Law
LRMC	Long-run marginal cost
MWh	Megawatt hour
MW	Megawatt
NPV	Net present value
NUoS	Network use of system
Rules	National Electricity Rules
SME	Small and medium enterprise
TSS	Tariff structure statement

Establishing our proposed network tariffs



B Establishing our proposed network tariffs

As set out in section 4.7, there are many factors we must have regard to when establishing network tariffs. This appendix sets out in greater detail our approach to establishing three of these factors—long run marginal costs; stand-alone costs; and avoided costs.

B.1 Establishing long-run marginal costs

The Rules require that each of our network tariffs must be based on the long run marginal cost (**LRMC**) of providing our service. ¹³ LRMC provides a measure of how our operating and capital expenditure will change (in the long-run) in response to incremental changes in demand. As the predominant driver of our network costs is meeting maximum demand, setting network tariffs based on LRMC will provide our customers with a cost-reflective signal that encourages efficient electricity usage.

We have estimated LRMC using an average incremental cost (AIC) approach. Specifically, our estimate of LRMC is based on our forecast of demand driven augmentation capital expenditure, and the operating costs, required to meet our forecast of cumulative growth in maximum demand on our network over the next 10 years. This approach is represented by the following formula:

 $\mathit{LRMC} = \frac{\mathit{NPV}\ of\ the\ demand\ driven\ augmentation\ capital\ costs\ and\ operating\ costsnd.}{\mathit{NPV}\ of\ forecast\ growth\ in\ the\ cumulative\ growth\ in\ peak\ demand}}$

Our reasons for adopting this approach for estimating LRMC include the following:

- our approach relies primarily on information that is available in our regulatory proposal—including that forecast growth in demand matches the forecast we have included in our regulatory proposal;
- our approach ensures that if our underlying demand and cost forecasts eventuate, a cost-reflective network price based on that LRMC will generate revenue over the evaluation period equal to the cost incurred as a result of that growth (in NPV terms); and
- our approach is commonly used by distribution networks, as it is generally considered to be well suited to situations where there is a fairly consistent profile of investment over time to service demand growth.

Our current LRMC estimates have only been used as a guide for setting our demand charges, as they are highly sensitive to the forecast inputs used. Ideally, a LRMC calculation would be based on at least 20 years of demand and expenditure forecasts. The reliability of these forecasts, however, becomes increasingly uncertain due to uncertainties about the future.

Our estimates of LRMC for each of our network tariff classes are set out in table B.1.

The Rules define LRMC as the cost of an incremental change in demand for direct control services provided by a distributor over a period of time in which all factors of production required to provide those direct control services can be varied.

Table B.1 LRMC estimates for each network tariff class

Tariff class	LRMC demand (\$/kVA)
Low voltage residential	94.2
Low voltage business	109.9
Large low voltage business	103.2
High voltage business	67.3
Sub-transmission	24.8

B.2 Establishing stand-alone costs

The stand-alone costs of providing network services are those costs we would incur to develop and operate our network in order to just serve a given network tariff class. Our approach to calculating stand-alone costs is derived from an estimate of the proportion of the cost of providing network infrastructure that would need to remain in place to service load for each tariff class if the other tariff classes were no longer required to be supplied.

If we set our network tariffs to recover more revenue than the stand-alone costs of serving a particular network tariff class, this may result in the following:

- a hypothetical alternate supplier may enter the market and profitably supply that particular network tariff class at a lower price; or
- a particular class of customers would be cross-subsidising customers in other network tariff classes—that is, customers in one particular network tariff class would be paying too much, and others too little.

Our estimates of current stand-alone costs for each of our network tariff classes are set out in table B.2.

Table B.2 Stand-alone cost estimates for each network tariff class

Tariff class	Stand-alone costs (\$'000s, \$2015)
Low voltage residential	184,368
Low voltage business	173,165
Large low voltage	106,613
High voltage	68,740
Sub-transmission	49,191

Source: CitiPower

B.3 Establishing avoidable costs

Avoidable costs are those we would avoid if we no longer served a specific network tariff class (whilst all other network tariff classes remained supplied). In a similar manner to stand-alone costs, the avoidable costs for each network tariff class were derived from an estimate of the cost of providing network infrastructure that would be avoided if a particular network tariff class was no longer served (with all else remaining equal).

If we set our network tariffs to recover less revenue than our avoidable costs, this may result in the following:

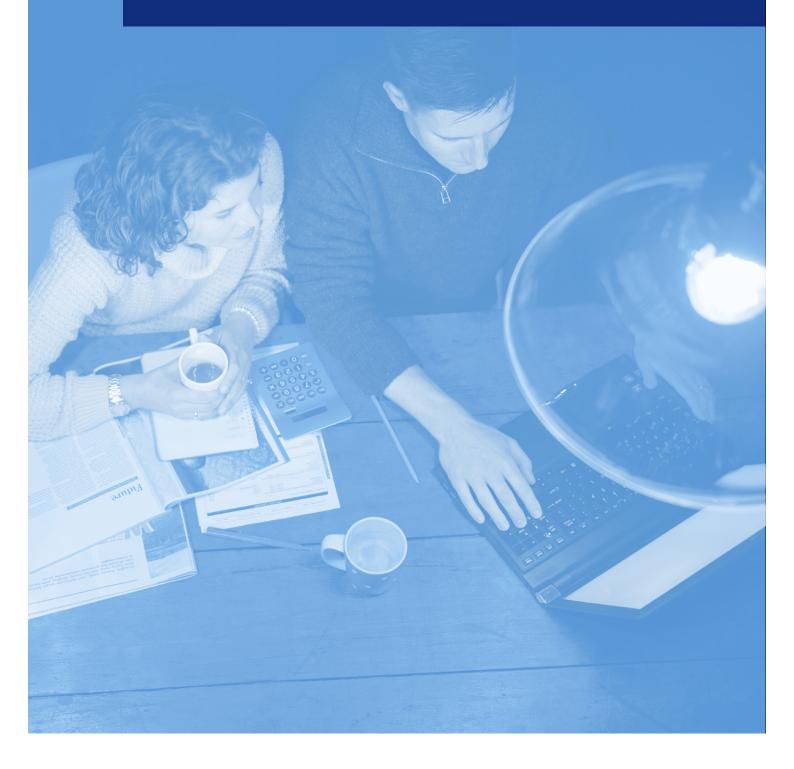
- it would be economically beneficial for us to stop supplying that network tariff class; or
- a particular class of customers would be cross-subsidised by customers in other network tariff classes—that is, customers in one particular network tariff class would be paying too little, and others too much.

Our estimates of current avoidable costs for each of our network tariff classes are set out in table B.3.

Table B.3 Avoidable cost estimates for each network tariff class

Tariff class	Avoidable costs (\$'000s, \$2015)
Low voltage residential	37,122
Low voltage business	43,766
Large low voltage	19,229
High voltage	1,644
Sub-transmission	165

Indicative pricing schedules



C Indicative pricing schedules

This appendix sets out our placeholder charges for the 2017–2020 TSS period. These placeholder charges have been set to collect the same amount of forecast revenue each year. The actual level of our charges will depend on the AER's final determination on distribution revenue.

C.1 Indicative pricing schedules for network services (NUOS)

Table C.1 Placeholder network tariffs: 2017

Network tariffs	Fixed		Demand			Usage		Time	of use (sur	nmer)	Time of use (non-summer)		
	(c/day)	Anytime (c/kVA/day)	Dec-Mar (c/kW/day)	Apr-Nov (c/kW/day)	Anytime (c/kWh)	Peak (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)
Transitional network tariffs													
Residential single rate	19	-	6	2	6	-	-	-	-	-	-	-	-
Residential single rate - bulk	16	-	4	1	4	-	-	-	-	-	-	-	-
Residential - flexible pricing	19	-	6	2	-	-	-	11	6	3	11	6	3
Residential - flexible pricing bulk	16	-	4	1	-	-	-	8	5	2	8	5	2
Residential two rate 5d	19	-	6	2	-	10	3	-	-	-	-	-	-
Residential two rate 5d - bulk	16	-	4	1	-	8	2	-	-	-	-	-	-
Residential interval	19	-	6	2	-	10	3	-	-	-	-	-	-
Residential interval - bulk	16	-	4	1	-	9	2	-	-	-	-	-	-
Non-residential single rate	41	-	8	3	7	-	-	-	-	-	-	-	-
Non-residential single rate - bulk	33	-	6	2	-	6	-	-	-	-	-	-	-
Non-residential two rate 5d	41	-	8	3	-	9	3	-	-	-	-	-	-
Non-residential two rate 5d - bulk	33	-	6	2	-	7	3	-	-	-	-	-	-
Non-residential interval	41	-	8	3	-	9	3	-	-	-	-	-	-
Non-residential interval - bulk	33	-	6	2	-	7	3	-	-	-	-	-	-
Non-residential flexible pricing	41	-	8	3	-	-	-	12	8	3	12	8	3
Non-residential - flexible pricing bulk	33	-	6	2	-	-	-	9	7	3	9	7	3

Network tariffs	Fixed		Demand			Usage		Time	of use (sur	nmer)	Time of	use (non-s	ummer)
	(c/day)	Anytime (c/kVA/day)	Dec-Mar (c/kW/day)	Apr-Nov (c/kW/day)	Anytime (c/kWh)	Peak (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)
Non-residential two rate 7d	41	-	8	3	-	8	3	-	-	-	-	-	-
Non-residential two rate 7d - bulk	33	-	6	2	-	7	3	-	-	-	-	-	-
Large two rate 7d	41	-	8	3	-	8	3	-	-	-	-	-	-
Cost-reflective network tariffs													
Residential standard	19	-	28	9	3	-	-	-	-	-	-	-	-
Residential bulk	16	-	20	7	2	-	-	-	-	-	-	-	-
Residential controlled load	-	-	-	-	-	-	2	-	-	-	-	-	-
Residential controlled load bulk	-	-	-	-	-	-	1	-	-	-	-	-	-
Residential non demand	19	-	-	-	12	-	-	-	-	-	-	-	-
Small business standard	41	-	40	13	4	-	-	-	-	-	-	-	-
Small business bulk	33	-	30	10	4	-	-	-	-	-	-	-	-
Small business non demand	41	-	-	-	15	-	-	-	-	-	-	-	-
Unmetered supplies	-	-	-	-	-	10	3	-	-	-	-	-	-
Large low voltage	1,800	28	-	-	-	4	2	-	-	-	-	-	-
Large low voltage bulk	1,300	22	-	-	-	4	2	-	-	-	-	-	-
High voltage	14,400	16	-	-	-	2	1	-	-	-	-	-	-
Sub-transmission	72,000	5	-	-	-	1	1	-	-	-	-	-	-

Table C.2 Placeholder network tariffs: 2018

Network tariffs	Fixed		Demand			Usage		Time	of use (sur	nmer)	Time of use (non-summer)		
	(c/day)	Anytime (c/kVA/day)	Dec-Mar (c/kW/day)	Apr-Nov (c/kW/day)	Anytime (c/kWh)	Peak (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)
Transitional network tariffs													
Residential single rate	19	-	11	4	6	-	-	-	-	-	-	-	-
Residential single rate - bulk	16	-	8	3	4	-	-	-	-	-	-	-	-
Residential - flexible pricing	19	-	11	4	-	-	-	9	5	3	9	5	3
Residential - flexible pricing bulk	16	-	8	3	-	-	-	7	4	2	7	4	2
Residential two rate 5d	19	-	11	4	-	8	3	-	-	-	-	-	-
Residential two rate 5d - bulk	16	-	8	3	-	7	2	-	-	-	-	-	-
Residential interval	19	-	11	4	-	8	3	-	-	-	-	-	-
Residential interval - bulk	16	-	8	3	-	7	2	-	-	-	-	-	-
Non-residential single rate	41	-	16	5	6	-	-	-	-	-	-	-	-
Non-residential single rate - bulk	33	-	12	4	-	6	-	-	-	-	-	-	-
Non-residential two rate 5d	41	-	16	5	-	8	4	-	-	-	-	-	-
Non-residential two rate 5d - bulk	33	-	12	4	-	7	3	-	-	-	-	-	-
Non-residential interval	41	-	16	5	-	8	4	-	-	-	-	-	-
Non-residential interval - bulk	33	-	12	4	-	7	3	-	-	-	-	-	-
Non-residential flexible pricing	41	-	16	5	-	-	-	10	7	3	10	7	3
Non-residential - flexible pricing bulk	33	-	12	4	-	-	-	8	6	4	8	6	4
Non-residential two rate 7d	41	-	16	5	-	7	4	-	-	-	-	-	-

Network tariffs	Fixed		Demand			Usage		Time	of use (sur	nmer)	Time of	use (non-s	ummer)
	(c/day)	Anytime (c/kVA/day)	Dec-Mar (c/kW/day)	Apr-Nov (c/kW/day)	Anytime (c/kWh)	Peak (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)
Non-residential two rate 7d - bulk	33	-	12	4	-	6	3	-	-	-	-	-	-
Large two rate 7d	41	-	16	5	-	7	4	-	-	-	-	-	-
Cost-reflective network tariffs													
Residential standard	19	-	28	9	3	-	-	-	-	-	-	-	-
Residential bulk	16	-	20	7	2	-	-	-	-	-	-	-	-
Residential controlled load	-	-	-	-	-	-	2	-	-	-	-	-	-
Residential controlled load bulk	-	-	-	-	-	-	1	-	-	-	-	-	-
Residential non demand	19	-	-	-	12	-	-	-	-	-	-	-	-
Small business standard	41	-	40	13	4	-	-	-	-	-	-	-	-
Small business bulk	33	-	30	10	4	-	-	-	-	-	-	-	-
Small business non demand	41	-	-	-	15	-	-	-	-	-	-	-	-
Unmetered supplies	-	-	-	-	-	10	3	-	-	-	-	-	-
Large low voltage	1,800	28	-	-	-	4	2	-	-	-	-	-	-
Large low voltage bulk	1,300	22	-	-	-	4	2	-	-	-	-	-	-
High voltage	14,400	16	-	-	-	2	1	-	-	-	-	-	-
Sub-transmission	72,000	5	-	-	-	1	1	-	-	-	-	-	-

Table C.3 Placeholder network tariffs: 2019

Network tariffs	Fixed		Demand			Usage		Time	of use (sur	nmer)	Time of	use (non-s	ummer)
	(c/day)	Anytime (c/kVA/day)		Apr-Nov (c/kW/day)	Anytime (c/kWh)	Peak (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)
Transitional network tariffs													
Residential single rate	19	-	17	6	5	-	-	-	-	-	-	-	-
Residential single rate - bulk	16	-	12	4	3	-	-	-	-	-	-	-	-
Residential - flexible pricing	19	-	17	6	-	-	-	7	5	3	7	5	3
Residential - flexible pricing bulk	16	-	12	4	-	-	-	5	4	2	5	4	2
Residential two rate 5d	19	-	17	6	-	7	3	-	-	-	-	-	-
Residential two rate 5d - bulk	16	-	12	4	-	5	2	-	-	-	-	-	-
Residential interval	19	-	17	6	-	7	3	-	-	-	-	-	-
Residential interval - bulk	16	-	12	4	-	5	2	-	-	-	-	-	-
Non-residential single rate	41	-	24	8	6	-	-	-	-	-	-	-	-
Non-residential single rate - bulk	33	-	18	6	-	5	-	-	-	-	-	-	-
Non-residential two rate 5d	41	-	24	8	-	7	4	-	-	-	-	-	-
Non-residential two rate 5d - bulk	33	-	18	6	-	6	4	-	-	-	-	-	-
Non-residential interval	41	-	24	8	-	7	4	-	-	-	-	-	-
Non-residential interval - bulk	33	-	18	6	-	6	4	-	-	-	-	-	-
Non-residential flexible pricing	41	-	24	8	-	-	-	8	6	4	8	6	4
Non-residential - flexible pricing bulk	33	-	18	6	-	-	-	7	6	4	7	6	4
Non-residential two rate 7d	41	-	24	8	-	6	4	-	-	-	-	-	-

Network tariffs	Fixed		Demand			Usage		Time	of use (sur	nmer)	Time of	use (non-s	ummer)
	(c/day)	Anytime (c/kVA/day)	Dec-Mar (c/kW/day)	Apr-Nov (c/kW/day)	Anytime (c/kWh)	Peak (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)
Non-residential two rate 7d - bulk	33	-	18	6	-	6	4	-	-	-	-	-	-
Large two rate 7d	41	-	24	8	-	6	4	-	-	-	-	-	-
Cost-reflective network tariffs													
Residential standard	19	-	28	9	3	-	-	-	-	-	-	-	-
Residential bulk	16	-	20	7	2	-	-	-	-	-	-	-	-
Residential controlled load	-	-	-	-	-	-	2	-	-	-	-	-	-
Residential controlled load bulk	-	-	-	-	-	-	1	-	-	-	-	-	-
Residential non demand	19	-	-	-	12	-	-	-	-	-	-	-	-
Small business standard	41	-	40	13	4	-	-	-	-	-	-	-	-
Small business bulk	33	-	30	10	4	-	-	-	-	-	-	-	-
Small business non demand	41	-	-	-	15	-	-	-	-	-	-	-	-
Unmetered supplies	-	-	-	-	-	10	3	-	-	-	-	-	-
Large low voltage	1,800	28	-	-	-	4	2	-	-	-	-	-	-
Large low voltage bulk	1,300	22	-	-	-	4	2	-	-	-	-	-	-
High voltage	14,400	16	-	-	-	2	1	-	-	-	-	-	-
Sub-transmission	72,000	5	-	-	-	1	1	-	-	-	-	-	-

Table C.4 Placeholder network tariffs: 2020

Network tariffs	Fixed		Demand			Usage		Time	of use (sur	nmer)	Time of	Time of use (non-summer)		
	(c/day)	Anytime (c/kVA/day)	Dec-Mar (c/kW/day)	Apr-Nov (c/kW/day)	Anytime (c/kWh)	Peak (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	
Transitional network tariffs														
Residential single rate	19	-	22	7	4	-	-	-	-	-	-	-	-	
Residential single rate - bulk	16	-	16	5	2	-	-	-	-	-	-	-	-	
Residential - flexible pricing	19	-	22	7	-	-	-	5	4	3	5	4	3	
Residential - flexible pricing bulk	16	-	16	5	-	-	-	4	3	2	4	3	2	
Residential two rate 5d	19	-	22	7	-	5	3	-	-	-	-	-	-	
Residential two rate 5d - bulk	16	-	16	5	-	3	2	-	-	-	-	-	-	
Residential interval	19	-	22	7	-	5	3	-	-	-	-	-	-	
Residential interval - bulk	16	-	16	5	-	4	2	-	-	-	-	-	-	
Non-residential single rate	41	-	32	10	5	-	-	-	-	-	-	-	-	
Non-residential single rate - bulk	33	-	24	8	-	5	-	-	-	-	-	-	-	
Non-residential two rate 5d	41	-	32	10	-	6	4	-	-	-	-	-	-	
Non-residential two rate 5d - bulk	33	-	24	8	-	5	4	-	-	-	-	-	-	
Non-residential interval	41	-	32	10	-	6	4	-	-	-	-	-	-	
Non-residential interval - bulk	33	-	24	8	-	5	4	-	-	-	-	-	-	
Non-residential flexible pricing	41	-	32	10	-	-	-	6	5	4	6	5	4	
Non-residential - flexible pricing bulk	33	-	24	8	-	-	-	5	5	4	5	5	4	
Non-residential two rate 7d	41	-	32	10	-	5	4	-	-	-	-	-	-	

Network tariffs	Fixed		Demand			Usage		Time	of use (sur	nmer)	Time of	use (non-s	ummer)
	(c/day)	Anytime (c/kVA/day)	Dec-Mar (c/kW/day)	Apr-Nov (c/kW/day)	Anytime (c/kWh)	Peak (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)	Peak (c/kWh)	Shoulder (c/kWh)	Off-peak (c/kWh)
Non-residential two rate 7d - bulk	33	-	24	8	-	5	4	-	-	-	-	-	-
Large two rate 7d	41	-	32	10	-	5	4	-	-	-	-	-	-
Cost-reflective network tariffs													
Residential standard	19	-	28	9	3	-	-	-	-	-	-	-	-
Residential bulk	16	-	20	7	2	-	-	-	-	-	-	-	-
Residential controlled load	-	-	-	-	-	-	2	-	-	-	-	-	-
Residential controlled load bulk	-	-	-	-	-	-	1	-	-	-	-	-	-
Residential non demand	19	-	-	-	12	-	-	-	-	-	-	-	-
Small business standard	41	-	40	13	4	-	-	-	-	-	-	-	-
Small business bulk	33	-	30	10	4	-	-	-	-	-	-	-	-
Small business non demand	41	-	-	-	15	-	-	-	-	-	-	-	-
Unmetered supplies	-	-	-	-	-	10	3	-	-	-	-	-	-
Large low voltage	1,800	28	-	-	-	4	2	-	-	-	-	-	-
Large low voltage bulk	1,300	22	-	-	-	4	2	-	-	-	-	-	-
High voltage	14,400	16	-	-	-	2	1	-	-	-	-	-	-
Sub-transmission	72,000	5	-	-	-	1	1	-	-	-	-	-	-

C.2 Indicative pricing schedules alternative control services

Table C.5 Metering charges (nominal, \$/NMI/p.a., GST exclusive)

Metering charges	2017	2018	2019	2020
Single phase	87.27	81.88	76.82	72.07
Three phase direct connected meter	114.07	107.02	100.41	94.20
Three phase CT connected meter	144.08	135.17	126.82	118.98

Source: CitiPower

Table C.6 Manual meter reading charge (nominal, \$/read, GST exclusive)

Manual meter reading charge	2017	2018	2019	2020
Manual meter reading	28.67	29.16	29.66	30.18

Source: CitiPower

Table C.7 Metering exit fees (nominal, \$, GST exclusive)

Metering exit fees	2017	2018	2019	2020
AMI 1P	387.87	363.10	317.32	282.72
AMI 3P	463.59	401.62	356.30	321.79
AMI 3P CT	1,144.60	1,080.91	1,061.13	1,048.47
Basic or MRIM all	39.07	39.73	40.40	41.08

Table C.8 Ancillary network services (nominal, \$, GST exclusive)

Ancillary network services	2017	2018	2019	2020
Meter investigation test (BH)	354.77	360.74	366.82	373.00
Meter investigation test (AH)	405.17	412.00	418.93	425.99
Meter accuracy test - single phase (BH)	454.04	461.69	469.47	477.37
Meter accuracy test - single phase (AH)	521.76	530.54	539.48	548.57
Meter accuracy test - single phase additional meter (BH)	199.77	203.14	206.56	210.04
Meter accuracy test - multi phase (BH)	588.42	598.33	608.41	618.65
Meter accuracy test - multi phase (AH)	679.56	691.01	702.65	714.48
Meter accuracy test - multi phase additional meter (BH)	340.23	345.96	351.79	357.71
Meter accuracy test - CT (BH)	575.25	584.94	594.80	604.81
Meter accuracy test - CT (AH)	664.10	675.29	686.66	698.23
Reconnections (incl customer transfer) BH	35.03	35.63	36.24	36.86
Reconnections (same day) BH	44.88	45.66	46.44	47.24
Reconnections (incl customer transfer) AH	162.14	164.94	167.77	170.69
Disconnection (BH only)	35.55	36.17	36.78	37.42
Disconnection (no AH service)	-	-	-	-
Disconnection for non-payment (BH only)	35.55	36.17	36.78	37.42
Special reading BH	28.67	29.16	29.66	30.18

Ancillary network services	2017	2018	2019	2020
Access to meter data	46.94	47.74	48.54	49.36
Service truck visit BH	541.31	550.43	559.70	569.13
Service truck visit AH	652.41	663.40	674.57	685.94
Wasted truck visit BH	339.22	344.93	350.74	356.65
Wasted truck visit AH	391.82	398.42	405.13	411.95
Reserve feeder - high voltage - \$ per kVA	5.72	5.81	5.91	6.01
Reserve feeder - low voltage - \$ per kVA	13.39	13.62	13.85	14.08
Remote meter reconfiguration	54.77	55.69	56.63	57.58
Remote re-energisation	10.33	10.50	10.68	10.86
Remote de-energisation	10.33	10.50	10.68	10.86
New connections responsible for metering	'			
Single phase BH	494.72	500.86	507.11	513.46
Single phase AH	548.47	555.51	562.68	569.96
Multi phase DC BH	588.11	594.25	600.49	606.84
Multi phase DC AH	641.85	648.90	656.06	663.34
Multi phase CT BH	2,490.25	2,528.43	2,567.25	2,606.73
Multi phase CT AH	3,059.40	3,104.07	3,149.49	3,195.68

Ancillary network services	2017	2018	2019	2020
New connections not responsible for metering				
Single phase BH	475.62	481.44	487.36	493.37
Single phase AH	526.03	532.70	539.48	546.37
Multi phase DC BH	569.00	574.82	580.74	586.75
Multi phase DC AH	619.42	626.08	632.86	639.76
Multi phase CT BH	2,116.08	2,144.86	2,174.13	2,203.89
Multi phase CT AH	2,405.39	2,439.04	2,473.27	2,508.07

Table C.9 Quoted services labour rates (nominal, \$, GST exclusive)

Quoted services	2017	2018	2019	2020
Skilled electrical worker BH	125.85	127.97	130.13	132.32
Skilled electrical worker AH	147.80	150.29	152.82	155.39
Support staff (Category RIN)	71.81	73.02	74.25	75.50

Table C.10 Public lighting services (nominal, \$, GST exclusive)

Public lighting services	2017	2018	2019	2020
Compact fluorescent T5 (2 X 14W)	54.06	56.13	57.79	59.25
Replacement luminaire - WDV recovery[1]	139.42	129.31	119.04	108.62

Public lighting services	2017	2018	2019	2020
Replacement luminaire - avoided costs[2]	-33.81	-35.07	-36.41	-37.79
Fluorescent 20 watt	150.42	152.23	153.90	155.33
Fluorescent 40 watt	151.18	152.99	154.67	156.11
Mercury vapour 50 watt	107.34	108.63	109.82	110.84
Mercury vapour 80 watt	75.59	76.50	77.34	78.05
Mercury vapour 125 watt	119.43	120.87	122.19	123.32
Mercury vapour 250 watt	106.47	108.71	110.85	112.97
Mercury vapour 400 watt	107.73	110.00	112.17	114.32
Mercury vapour 700 watt	158.43	161.77	164.95	168.11
Sodium high pressure 100 watt	127.64	130.36	132.96	135.54
Sodium high pressure 150 watt	125.14	127.81	130.35	132.88
Sodium high pressure 220 watt	127.00	129.68	132.22	134.76
Sodium high pressure 250 watt	126.75	129.42	131.96	134.49
Sodium high pressure 360 watt	129.28	132.01	134.60	137.18
Sodium high pressure 400 watt	139.42	142.36	145.16	147.94
Metal halide 70 watt	160.25	162.17	163.95	165.47
Metal halide 100 watt	196.47	200.66	204.65	208.63
Metal halide 150 watt	197.72	201.94	205.95	209.95

Public lighting services	2017	2018	2019	2020
Metal halide 250 watt	152.09	155.30	158.35	161.39
Metal halide 400 watt	152.09	155.30	158.35	161.39
Metal halide 1000 watt	226.87	231.66	236.21	240.74

Our customer, retailer and stakeholder engagement



D Our customer, retailer and stakeholder engagement

Stakeholder engagement is core to the strategic priorities of our business. We regularly seek feedback from our customers to help shape our business, and we see it as our responsibility to understand our customers' requirements. This ensures we continue to deliver services that meet their needs now and into the future.

In 2013 we commenced our stakeholder engagement program for the 2016–2020 regulatory control period. We undertook a research phase which found almost 80 per cent of our customers did not know who were, what our role was or what services we provide. We responded by launching www.talkingelectricity.com.au and delivering information to our customers via a mail out. We also provided input to the AER as they developed the Consumer Engagement Guideline for Network Service Providers (Consumer Engagement Guidelines).

In 2014 we began engaging our customers around network tariff reform. Since this time we have continued to inform and consult with our customers, retailers and stakeholders. Our consultation mechanisms have included focus groups, online surveys, face-to-face meetings, stakeholder forums, facts sheets, social media, our Talking Electricity website and e-news. We also engaged an independent market research company to learn about our customers' views on network tariff reform.

The conversations we had and the feedback we gathered has helped shape our TSS for the 2017–2020 period.

D.1 Our objectives for stakeholder engagement

The major focus of our stakeholder engagement plan is to ensure key customer segments, retailers and stakeholders understand our network tariff structures, their impacts and how we propose to transition to these network tariffs. As a result, the key objectives of our plan were to:

- engage key customer segments to ensure they understand our proposed changes to network tariff structures, the timing of the introduction of our proposed network tariff structures and what they can do to reduce their electricity bills;
- engage with retailers to ensure they understand our proposed changes to network tariff structures, to identify any billing system constraints and to build new/enhance existing relationships with pricing managers;
- ensure stakeholders are well equipped to actively participate in the consultation process; and
- adopt a best practice approach to engagement, by following the internationally recognised IAP2 public participation spectrum.

D.2 Guiding engagement principles

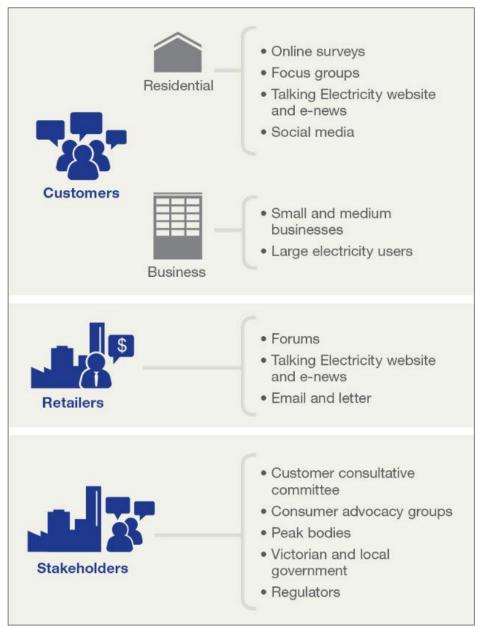
The following guiding principles underpinned our engagement plan:

- targeted engagement using network tariff and customer impact analysis;
- building on existing stakeholder relationships and our Customer Consultative Committee (CCC);
- leveraging engagement activities, learnings and tools such as the Talking Electricity website and e-news;
- undertaking quantitative research;
- ensuring engagement activities were in accordance with the principles in the AER's Consumer Engagement Guideline, including:
 - clear, accurate, relevant and timely;
 - accessible and inclusive;
 - transparent; and
 - measurable.

D.3 Our customers, retailers and stakeholders

As part of our engagement program, we identified customers, retailers and stakeholders to engage with via a variety of channels and activities. Figure D.1 provides an overview of our customers, retailers and stakeholders.

Figure D.1 Our customers, retailers and stakeholders



Source: CitiPower

Residential customers

We have over 325,000 customers, 83 per cent of which are residential customers. We sought views from our residential customers across a broad range of demographics including age, income and geographic location.

Business customers

Our business customers comprise 17 per cent of our total customer base. These customers are a diverse group, and 95 per cent of our SME customers have an annual network spend of less than \$8,000. Our commercial and industrial customers typically have an annual network spend of between \$5,000 and \$2,000,000 and are account managed by our Regional Business Managers.

We sought views from our energy retailers on our proposed introduction of cost-reflective network tariffs.

Stakeholders

We sought views from other stakeholder groups, including the following:

- customer consultative committee—was established in 2000, members included a customer advocacy group representative, industry, local government and rural stakeholders;
- consumer advocacy groups—we have relationships with the Energy and Water Ombudsman (EWOV), St Vincent de Paul and Consumer Utilities Advocacy Centre (CUAC)
- peak bodies—various parts of our business have a long standing relationship with peak bodies and local development associations
- Victorian and local government—our business has long standing relationships with state and local government
- regulators—in the course of business as usual stakeholder engagement activity, we have frequent bilateral meetings with regulators such as the AER and Energy Safe Victoria (ESV)

Our engagement approach

Our engagement approach focused on talking to customers, retailers and stakeholders across our electricity distribution area. Opportunities to participate were promoted via our Talking Electricity website and e-news, and directly via email and phone.

D.4.1 2014 approach

In 2014 we took the opportunity to gather feedback from our customers and stakeholders while conducting our stakeholder engagement program for the 2016–2020 regulatory control period. For example:

- we engaged an external research company (Colmar Brunton) to conduct research on network tariff reform specifically, Colmar Brunton:
 - held focus groups with residential customers and conducted interviews with small and medium businesses, asking for their views on consumption based network tariffs and location based network tariffs;
 - ran an online customer survey, asking for views on small increases in electricity bills to: improve network infrastructure; reduce the risk of fire danger; and create screening zones around substations, or to move them underground; and
 - conducted in-depth interviews with our top 200 largest electricity users, asking for their views on critical peak rebates, location based network tariffs and using kilovolt amperes (kVA) rather than kilowatts (kW) to measure demand.
- we also engaged Nature Research and Deloitte Access Economics to gather residential customers views on network tariffs. We asked if residential customers would be open to rebates for reducing their electricity

usage on the hottest days of the year and allowing an electricity provider to remotely control air conditioners/pool pumps.

- in our Directions and Priorities consultation paper, we featured feedback prompts where we asked customers and stakeholders for their views on:
 - our existing network tariff structures;
 - the introduction of a maximum demand tariff; and
 - other network tariff options such as critical peak pricing, consumption and location based network tariffs.

D.4.2 2015 approach

In 2015 we conducted a stakeholder engagement program which focused solely on network tariff reform. Table D.1 details the stakeholders we engaged with, the channels we used to reach these stakeholders, and the specific activities we undertook. Our activities can be assessed against the IAP2 framework as meeting the inform and consult objectives.

Table D.1 Our 2015 stakeholder engagement approach and activities

Engagement channel	Stakeholder	Activities
Talking Electricity website Talking Electricity e-news	All stakeholders: Residential and SME customers Commercial and industrial customers Retailers Government departments Government agencies State MPs and Ministers Local MPs Local councils Customer advocacy groups Key industry bodies and groups Customer Consultative Committee	Updated the Talking Electricity website and used the e-news to share news as follows: • fact sheets; • updates; • news; and • other information. IAP2 Objective: Inform
Customer Consultative Committee	5 x committee members who are external	Informed about engagement plans/ segment strategies and encouraged to promote website and e-news. IAP2 Objective: Inform/Consult
Forums	Retailers Customer advocacy groups Other stakeholders (as required)	Used to identified the best way to communicate/consult with key stakeholders on: rationale for reform; our approach to network tariff structures; and structures and impacts. IAP2 Objective: Inform/Consult
Bilateral meetings	 Retailers Government agencies State MPs and Ministers Customer advocacy groups Key industry bodies and groups 	Meetings were held on a regular basis with key members of our regulation team IAP2 Objective: Inform/Consult

Engagement channel	Stakeholder	Activities
Research	Residential	Nature Research is developed an online survey for collecting quantitative data IAP2 Objective: Inform/Consult
Social media (Twitter and Facebook)	All stakeholders	Implemented a social media campaign encouraging stakeholders to sign up to enews, established listening posts. IAP2 Objective: Inform

D.4.3 Engagement with key segments

We undertook engagement activities for key segments as per below.

Retailer engagement

We engaged with retailers on a range of issues, including the following:

- invitations were issued to representatives from all electricity retailers and forums were held in July 2015, they covered a range of topics including:
 - context around network tariff reform and our engagement approach;
 - an overview of our business and network profiling analysis;
 - understanding our existing network tariff arrangements (by segment as appropriate), preferred network tariff structures, customer impact analysis and transition arrangements;
 - discussion on key challenges and opportunities in respect to network tariff structures and transition arrangements to ensure smooth implementation of our proposed network tariffs, as well as identifying opportunities to work together to ensure success; and
 - they also helped to identify the best way to undertake further engagement and consultation activities for us to develop its TSS for each business.
- our regulation team held bilateral meetings with Pricing and Regulation Managers from all electricity retailers. They were identified following a review of their customer numbers and monthly network use of system (NUoS) revenue;
- communication took place via the retailer newsletter developed and distributed by the customer services group; and
- customer services group held regular bilateral meetings with their retailer counterparts.

Commercial and Industrial Customers (Large Users)

To support the move from a \$/kW demand charge to a rolling 12 month KVA demand tariffs effective from 1 July 2016, the following engagement activities took place:

- letter and kVA demand tariff fact sheet issued to all large users; and
- industry bodies and associations representing large users to be notified of the change, and as appropriate bilateral meetings offered for further information.

Research

We engaged Nature Research to undertake research activities to understand and measure the reaction of our customers to proposed reforms to networks tariff structures, and to gauge customers' acceptance of our proposed transition arrangements. Key insights from the research were used to shape the development of our TSS.

The research addressed four broad goals:

- quantified the level of acceptance of preferred network tariff structures amongst customers, with a view to validating customer segments currently expected to be most impacted;
- measured the level of understanding of preferred network tariff structures (when outlined to the customer) and identified areas/aspects that customers may feel are hard to understand, unappealing, irrelevant or unbelievable;
- aim to uncover what can support changing customer behaviour, in order to move usage away from peak periods; and
- understand ways in which category engagement can be increased and how we can most effectively interact with our customers.

An online survey was used to encourage broad participation from customers from across the network.

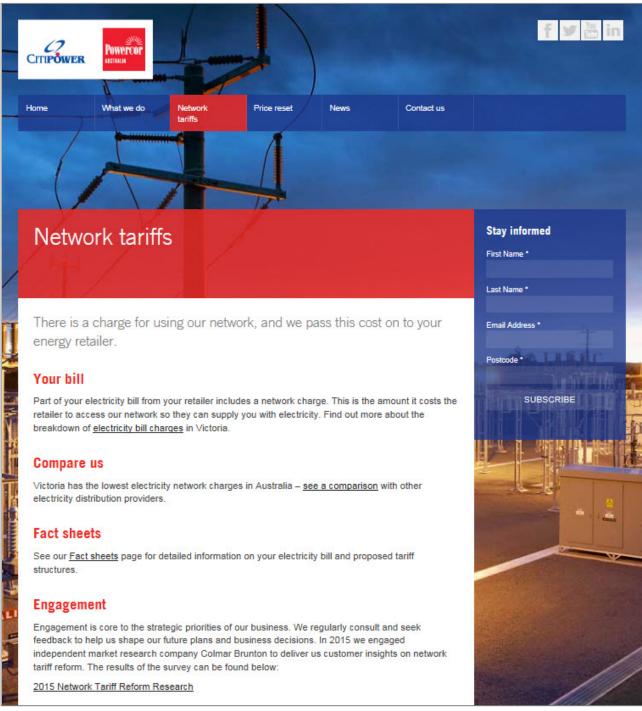
D.4.4 Engagement channels

Our engagement channels are discussed in detail below.

Talking Electricity website

Talking Electricity is a dedicated engagement website that provides customers, retailers and stakeholders with information and updates on network tariff reform. We used it house information including fact sheets, electricity bill detailed information, research and seasonal demand profiles.

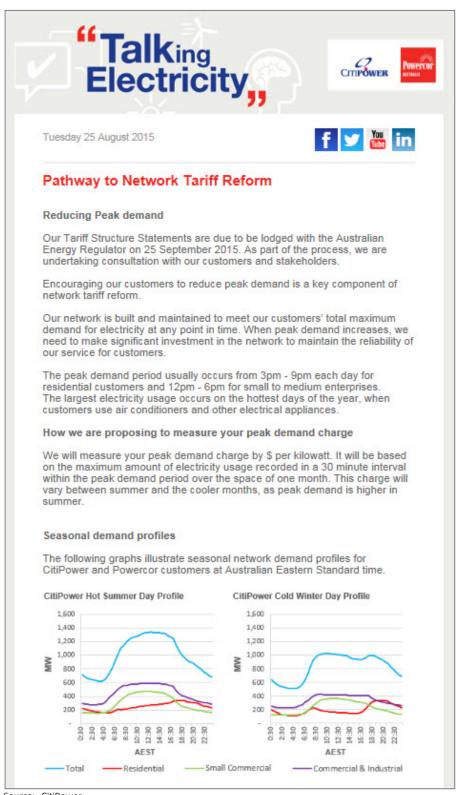
Figure D.2 Talking Electricity network tariffs page



Talking Electricity e-news

Our e-news provided stakeholders with the latest information on network tariff form. Subscribers totalled 272 at end September 2015, with an open rate of about 50 per cent, compared to the industry average of 18 per cent.

Figure D.3 Example of Talking Electricity e-news



Social media (Facebook and Twitter)

We used social media platforms, Facebook and Twitter, as a call to action to encourage customers to complete our 2015 Nature Research survey. Our Facebook posts reached up to 300 people.

Figure D.4 Social media posts (Facebook)

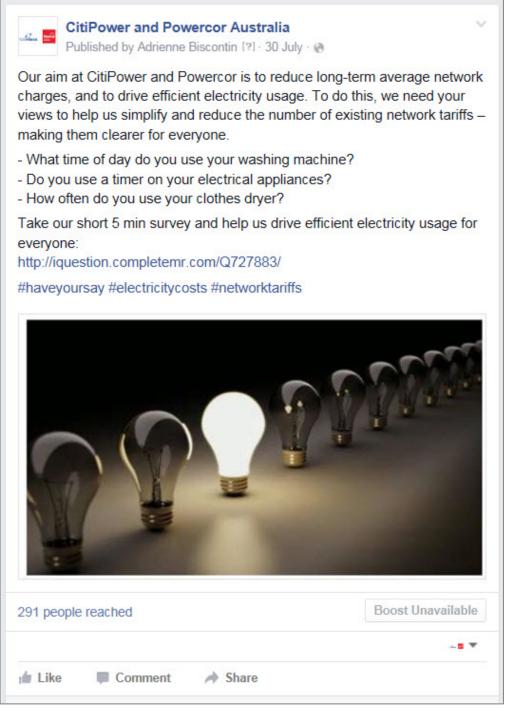


Figure D.5 Social media posts (Twitter)



D.5 What our customers, retailers and stakeholders told us

Through our engagement program, customers, retailers and stakeholders told us about their views on our existing network tariff structure, consumption, location and maximum demand tariffs, rebates and our proposed introduction of cost-reflective network tariffs. We used this feedback to form key insights on network tariff reform, which can be summarised as follows:

- changes to network tariff structures need to be transparent, extensively communicated and well understood by customers and key decision makers;
- our proposed network tariff structure is as appealing and fair as the current network tariff structure;
- residential customers want to be in control of their own electricity usage (including when and how they use electricity);
- small to medium enterprise customers may find it challenging to change consumption behaviour to reduce network demand due to their reliance on electricity at particular times; and
- large electricity users did not support location based network tariffs, as they may disadvantage particular customers.

The feedback we gathered has helped us develop our TSS, and is summarised in figure D.6, figure D.7 and figure D.8.

Figure D.6 Key insights from our stakeholder engagement program



Figure D.7 What you told us about particular network tariffs and rebates

What we did in 2014

Our engagement activities included:

- An online customer survey run by Colmar Brunton
- An online customer survey run by Nature Research and Deloitte Access Economics
- Residential customer focus groups conducted by Colmar Brunton
- Small to medium business and large electricity user interviews conducted by Colmar Brunton
- Feedback prompts in our Directions and Priorities Consultation Paper.

2014

What you told us about...

The current tariff structure

- Limited in its ability to reduce peak demand, incentivise energy efficiency and reduce power at critical periods
- It is unfair and results in consumers paying more
- Not economical to have a flat rate
- Too confusing.

Consumption based tariffs

- There is little appetite to pay more for additional build on the network to support higher peak period usage
- Unwilling to change consumption behaviour to reduce network demand during high peak periods.

Location based tariffs

- Residential customers and small to medium businesses are willing to spread the cost so those in areas that need additional upgrades are not faced with higher power bills
- Large electricity users said they lack social equity, disadvantage those in remote areas and present difficulties in stable cost forecasting.

Proposed introduction of a maximum demand tariff

- Help incentivise and affect the adoption of technologies to assist with the smart and efficient use of energy
- Must be transparent, well understood by customers and accompanied by an effective communication and engagement campaign
- Customers will not have to subsidise others who use large amounts of electricity.

We also asked you about...

Critical peak rebates if electricity usage is reduced on the hottest days of the year

- A majority of residential customers supported this rebate
- The top two preferred options for residential customers were to turn off their washing machine or air conditioner during the peak period.

Rebates for residential customers if they allow an electricity provider to remotely control appliances on the hottest days of the year

- The majority of customers said they like to be in control of their own electricity usage
- Customers with pool pumps supported a rebate for an electricity provider to remotely control them
- There was limited support for an electricity provider to remotely control air conditioners.

Figure D.8 What you told us about the introduction of cost-reflective network tariffs



D.6 How we responded to your feedback

The feedback we gathered from our customers, retailers and stakeholders has helped shape our TSS for the 2017–2020 period. A recurring piece of feedback we received throughout the stakeholder consultation process was that it would be beneficial for retailers and our customers if we aligned (as much as practicable) with the

other Victorian distribution companies on network tariff reform. We have done this in the following components of our network tariffs:

- the maximum demand measurement period for residential customers (including the time, day and period);
- the use of similar terminology when communicating our network tariff structures to our customers and stakeholders; and
- ensuring customers have choice regarding the transition to cost-reflective network tariffs (e.g. allowing customers to opt-out of our demand tariff in the first 12-months).

Customer, retailer and stakeholder expectations and concerns have been integrated into our planning and have been considered as a vital part of developing our cost-reflective network tariffs structure. Table D.2 provides further detail.

Table D.2 Our response to your feedback

What you told us	How we responded	
Consistency across all distribution businesses will assist in minimising transaction costs on all parties, particularly regarding billing systems	Distributors have aligned residential demand charge, including maximum demand period of 3:00PM to 9:00PM, excluding weekends and public holidays	
Consistency across all distributors on network tariff structures will help retail customers understand our network tariff structures	maximum demand is based on monthly maximum 30 minutes usage	
Alignment across all distribution businesses on the maximum demand period will make it easier for consumers to understand and respond to cost-reflective pricing		
The delivery of consistent messaging throughout the network tariff reform process will lessen confusion for electricity users	Distribution companies will work together to deliver consistent messages once the network tariff reform process begins	
Supportive of the introduction of a peak kW demand charge from 3:00PM to 9:00PM on weekdays, but not on weekends and public holidays	The maximum demand charge will only apply across all distribution companies on weekdays, not weekends and public holidays	
Measuring demand over as narrow a period as possible would provide customers greater ability to manage any possible impacts due to changes in our network tariffs	A period of only six hours on work days only has been proposed	
Distribution companies should consider an electric vehicle network tariff	It is premature to design an electric vehicle network tariff, as electric vehicle penetration is not expected to become material until 2020. We don't yet know what the charging model and usage characteristics will be	
Reduce the residential network tariff to only two network tariff components	Removing either the fixed charge or usage charge would exacerbate bill impacts from the introduction of a demand charge for some customers	
A time of use network tariff is cost-reflective so it is not necessary to introduce a demand tariff	A demand charge is more cost-reflective since our network is designed to meet maximum demand. A time of use signal is not as strong as a maximum demand signal. A maximum demand signal is more consistent with long run marginal costs	

What you told us	How we responded
Locational tariffs would be more cost-reflective (or locational tariffs would be unfair)	Most stakeholders were opposed to locational tariffs because the distribution impacts are perceived to be severe. Locational tariffs may also be volatile, and the level of tariffs contentious. They would also be inconsistent with minimising transaction costs and achieving consistency across the Victorian distributors
The transition to a demand tariff should be quicker	Our proposed transition is based on keeping customer impacts within an acceptable range. If there is a material revenue reduction in 2017, transition will be quicker
The demand tariff should be a higher proportion of the customer bill	We have taken a cautious approach to setting the level of the demand tariff which will be reviewed at the next TSS
A hardship network tariff should not be introduced	We are not proposing a hardship network tariff
The first year of transition should coincide with a network price reduction	The AER has been requested to defer the revenue reduction until 2017
The texting system currently used to notify customers of outages could be notify customers about maximum demand	This will be considered once a demand charge is in place
In a move in move out situation, the new customer should not pay for the demand of the old customer	We are not always aware of all move in/out situations. Our systems are not able to calculate two maximum demands in one month when this occurs
Prefer the demand charge to be the same for every month of the year	This would not be cost-reflective since our maximum demand occurs predominantly in summer
Would prefer no minimum level of maximum demand	We have not proposed a minimum level of maximum demand
Could we have seasonal fixed charges so as to offset the impact of the seasonal demand charges	It may not educate customers to realise it costs more to supply customers in summer
You have provided evidence that in general customers who use less electricity will be worse off compared to customers who consume more. Why can't network tariffs be designed so that smaller uses are better off?	Our current inclining block network tariff provides a cross- subsidy from large users to small users, so cost-reflective network tariffs will unwind the existing cross subsidy. Additionally, customers who will experience an immediate bill reduction will have a higher load factor. These customers are more likely to consume more electricity
We should have an inclining demand charge to reduce impacts for smaller users	An inclining block charge is not cost-reflective—every kW of demand at a certain time makes the same contribution to maximum demand. It would also increase complexity
Provide retailers with all distributor customer communication material	We have shared communication with the relevant retailers
A cautious approach should be taken to network tariff reform	We believe our TSS proposal reflects a cautious approach
Can network costs be shown separately on customer bills?	We are consulting with the Victorian Government about the feasibility of implementing this

What you told us	How we responded
Simpler network tariffs—cost-reflective network tariffs should be developed in a manner that makes they easy for consumers to understand	We believe our proposed fixed, anytime usage and demand charge is simple. There are many complex elements we have not included in our cost-reflective network tariffs structure
Consistent methodology should be used by all distributors in developing cost-reflective network tariffs	The Victorian distributors have aligned on key elements related to cost-reflective network tariff structures
Long term price certainty is necessary in the development of cost-reflective network tariffs	The indicative network tariff schedule in our revised TSS will provide customers with a better view of the longer term price path of individual network tariffs
Transition to cost-reflective network tariffs should be over a single regulatory period	We plan to transition customers to cost-reflective network tariffs over a single regulatory period
Consumers need to be educated	We intend to work collaboratively with retailers and other stakeholders on customer education

D.7 Next steps for our engagement process

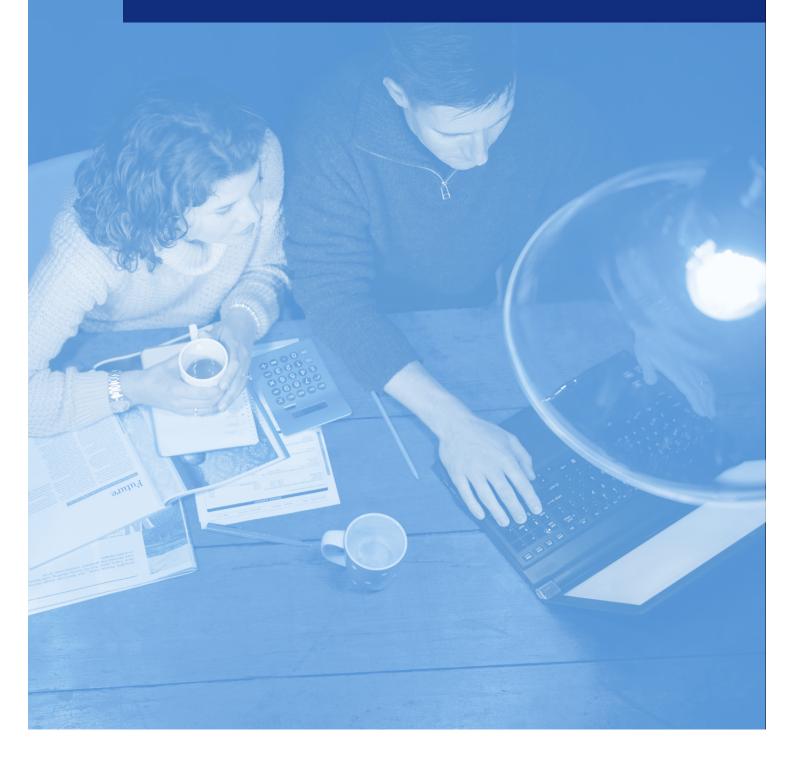
Our network tariff reform stakeholder engagement program has allowed us to deliver our ongoing commitment to improving the way we engage with our customers, retailers and stakeholders on what matters to them. Ensuring we meet the energy needs of Victorians today and well into the future is a priority for us and something we will continue to drive forward.

Learnings from the network tariff reform engagement process will help further refine our business-wide stakeholder engagement process to ensure it remains aligned with our current and future priorities.

Over the coming period our Talking Electricity website and e-news will provide our customers, retailers and stakeholders with updates on the AER's TSS determination process, and we will engage on a face-to-face basis where we can.

We will continue to develop, maintain and enhance long term relationships with our customers, retailers and stakeholders, and ensure we remain focused on the long term, interests and needs of our customers.

Assigning and reassigning customers



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E Assigning and reassigning customers

The AER's 2016–2020 distribution determination must set out provisions governing the assignment of retail customers to tariff classes or the re-assignment of retail customers from one tariff class to another, having regard to the principles set out in clause 6.18.4(a) of the Rules. The Rules also require the AER's 2016–2020 distribution determination contain provisions for an effective system of assessment and review of the basis on which a customer is charged if the charging parameters for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer. Our revised TSS will take into account the AER's preliminary determination on these matters.

The process under which new customers are assigned to network tariff classes and network tariffs occurs following the receipt of a connection application by the customer or their retailer. Under our process, a customer that lodges an application to modify or upgrade an existing network connection is treated identically to a new customer.

Customers will be assigned or reassigned to network tariffs in accordance with the eligibility criteria in chapter 4.

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Compliance matrix



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F Compliance matrix

The compliance matrix set out in table F.1 has been prepared with reference to version 66 of the Rules.

Table F.1 Compliance matrix

Rule provision	Amending clause	Requirement	Relevant section	
Part E: Regulatory proposal and proposed tariff structure statement				
6.8.2		Submission of tariff structure statement		
6.8.2(a)	11.76.2(a)	(a) A Distribution Network Service Provider must, whenever required to do so under paragraph (b), submit to the AER a proposed tariff structure statement related to the distribution services provided by means of, or in connection with, the Distribution Network Service Provider's distribution system.	Noted	
6.8.2(b)	11.76.2(a)	(b) A proposed tariff structure statement must be submitted: by 25 September 2015.	Noted	
6.8.2(c)	11.76.2(a)	A proposed tariff structure statement must be accompanied by information that contains a description (with supporting materials) of how the proposed tariff structure statement complies with the pricing principles for direct control services.	TSS: chapter 3–5; and appendix B and D	
6.8.2(c1a)	11.76.2(a)	(c1a) The proposed tariff structure statement must be accompanied by an overview paper which includes a description of how the Distribution Network Service Provider has engaged with retail customers and retailers in developing the proposed tariff structure statement and has sought to address any relevant concerns identified as a result of that engagement.	Overview paper	
6.8.2(d1)	11.76.2(a)	(d1) The proposed tariff structure statement must be accompanied by an indicative pricing schedule.	TSS: appendix C	
6.8.2(d2)	11.76.2(a)	(d2) The proposed tariff structure statement must comply with the pricing principles for direct control services.	TSS: chapter 3–5; and appendix B and D	
6.8.2(e)	11.76.2(a)	(e) If more than one distribution system is owned, controlled or operated by a Distribution Network Service Provider, then, unless the AER otherwise determines, a separate tariff structure statement are to be submitted for each distribution system.	Noted	
Part I: Distribution p	ricing rules			
6.18.1A		Tariff structure statement		

Rule provision	Amending clause	Requirement	Relevant section
6.18.1A(a)		(a) A tariff structure statement of a Distribution Network Service Provider must include the following elements:	Noted
6.18.1A(a)(1)		(1) the tariff classes into which retail customers for direct control services will be divided during the relevant regulatory control period;	TSS: section 4.1
6.18.1A(a)(2)		(2) the policies and procedures the Distribution Network Service Provider will apply for assigning retail customers to tariffs or reassigning retail customers from one tariff to another (including any applicable restrictions);	TSS: appendix E
6.18.1A(a)(3)		(3) the structures for each proposed tariff;	TSS: section 4.2–4.6
6.18.1A(a)(4)		(4) the charging parameters for each proposed tariff; and	TSS: section 4.2–4.6
6.18.1A(a)(5)		(5) a description of the approach that the Distribution Network Service Provider will take in setting each tariff in each pricing proposal of the Distribution Network Service Provider during the relevant regulatory control period in accordance with clause 6.18.5.	TSS: section 5
6.18.1A(b)		(b) A tariff structure statement must comply with the pricing principles for direct control services.	TSS: chapter 3–5; and appendix B and D
6.18.1A(c)		(c) A Distribution Network Service Provider must comply with the tariff structure statement approved by the AER and any other applicable requirements in the Rules, when the provider is setting the prices that may be charged for direct control services.	Noted
6.18.1A(d)		(d) Subject to clause 6.18.1B, a tariff structure statement may not be amended during a regulatory control period. Note: Rule 6.13 still applies in relation to a tariff structure statement because that rule deals with the revocation and substitution of a distribution determination (which includes a tariff structure statement) as opposed to its amendment.	Noted
6.18.1A(e)		(e) A tariff structure statement must be accompanied by an indicative pricing schedule which sets out, for each tariff for each regulatory year of the regulatory control period, the indicative price levels determined in accordance with the tariff structure statement.	TSS: appendix C
6.18.3		Tariff classes	
6.18.3(b)		(b) Each customer for direct control services must be a member of 1 or more tariff classes.	TSS: section 4.1; and appendix E

Rule provision	Amending clause	Requirement	Relevant section
6.18.3(c)		(c) Separate tariff classes must be constituted for retail customers to whom standard control services are supplied and retail customers to whom alternative control services are supplied (but a customer for both standard control services and alternative control services may be a member of 2 or more tariff classes).	TSS: section 4.8
6.18.3(d)		(d) A tariff class must be constituted with regard to:(1) the need to group retail customers together on an economically efficient basis; and(2) the need to avoid unnecessary transaction costs.	TSS: section 4.1
6.18.4		Principles governing assignment or re-assignment of retail customers to tariff classes and assessment and review of basis of charging	
6.18.4(a)		(a) In formulating provisions of a distribution determination governing the assignment of retail customers to tariff classes or the re-assignment of retail customers from one tariff class to another, the AER must have regard to the following principles:	Noted
6.18.4(a)(1)		 (1) retail customers should be assigned to tariff classes on the basis of one or more of the following factors: (i) the nature and extent of their usage; (ii) the nature of their connection to the network; (iii) whether remotely-read interval metering or other similar metering technology has been installed at the retail customer's premises as a result of a regulatory obligation or requirement; 	TSS: section 4.1; and section 4.4–4.6
6.18.4(a)(2)		(2) retail customers with a similar connection and usage profile should be treated on an equal basis;	TSS: section 4.4–4.6
6.18.4(a)(3)		(3) however, retail customers with micro-generation facilities should be treated no less favourably than retail customers without such facilities but with a similar load profile;	TSS: section 4.4–4.6
6.18.4(a)(4)		(4) a Distribution Network Service Provider's decision to assign a customer to a particular tariff class, or to re-assign a customer from one tariff class to another should be subject to an effective system of assessment and review. Note: If (for example) a customer is assigned (or reassigned) to a tariff class on the basis of the customer's actual or assumed maximum demand, the system of assessment and review should allow for the reassignment of a customer who demonstrates a reduction or increase in maximum demand to a tariff class that is more appropriate to the customer's load profile.	TSS: appendix E

Rule provision	Amending clause	Requirement	Relevant section
6.18.4(b)		(b) If the charging parameters for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.	Noted
6.18.5		Pricing principles	
		Network pricing objective	
6.18.5(a)		(a) The network pricing objective is that the tariffs that a Distribution Network Service Provider charges in respect of its provision of direct control services to a retail customer should reflect the Distribution Network Service Provider's efficient costs of providing those services to the retail customer.	Noted
		Application of the pricing principles	
6.18.5(b)		(b) Subject to paragraph (c), a Distribution Network Service Provider's tariffs must comply with the pricing principles set out in paragraphs (e) to (j).	Noted
6.18.5(c)		 (c) A Distribution Network Service Provider's tariffs may vary from tariffs which would result from complying with the pricing principles set out in paragraphs (e) to (g) only: (1) to the extent permitted under paragraph (h); and (2) to the extent necessary to give effect to the pricing principles set out in paragraphs (i) to (j). 	Noted
6.18.5(d)		(d) A Distribution Network Service Provider must comply with paragraph (b) in a manner that will contribute to the achievement of the network pricing objective.	Noted
		Pricing principles	
6.18.5(e)		(e) For each tariff class, the revenue expected to be recovered must lie on or between:(1) an upper bound representing the stand-alone cost of serving the retail customers who belong to that class; and(2) a lower bound representing the avoidable cost of not serving those retail customers.	TSS: section 4.7; and appendix B

Rule provision	Amending clause	Requirement	Relevant section
6.18.5(f)		(f) Each tariff must be based on the long run marginal cost of providing the service to which it relates to the retail customers assigned to that tariff with the method of calculating such cost and the manner in which that method is applied to be determined having regard to:	TSS: section 4.3–4.7; and appendix B
		(1) the costs and benefits associated with calculating, implementing and applying that method as proposed;	
		(2) the additional costs likely to be associated with meeting demand from retail customers that are assigned to that tariff at times of greatest utilisation of the relevant part of the distribution network; and	
		(3) the location of retail customers that are assigned to that tariff and the extent to which costs vary between different locations in the distribution network.	
6.18.5(g)		(g) The revenue expected to be recovered from each tariff must:(1) reflect the Distribution Network Service Provider's total efficient costs of serving the retail customers that are assigned to that tariff;	TSS: section 4.3–4.7; and appendix B
		(2) when summed with the revenue expected to be received from all other tariffs, permit the Distribution Network Service Provider to recover the expected revenue for the relevant services in accordance with the applicable distribution determination for the Distribution Network Service Provider; and	
		(3) comply with sub-paragraphs (1) and (2) in a way that minimises distortions to the price signals for efficient usage that would result from tariffs that comply with the pricing principle set out in paragraph (f).	
6.18.5(h)		(h) A Distribution Network Service Provider must consider the impact on retail customers of changes in tariffs from the previous regulatory year and may vary tariffs from those that comply with paragraphs (e) to (g) to the extent the Distribution Network Service Provider considers reasonably necessary having regard to:	TSS: section 4.3–4.7; and section 5
		(1) the desirability for tariffs to comply with the pricing principles referred to in paragraphs (f) and (g), albeit after a reasonable period of transition (which may extend over more than one regulatory control period);	
		(2) the extent to which retail customers can choose the tariff to which they are assigned; and	
		(3) the extent to which retail customers are able to mitigate the impact of changes in tariffs through their usage decisions.	

Rule provision	Amending clause	Requirement	Relevant section
6.18.5(i)		(i) The structure of each tariff must be reasonably capable of being understood by retail customers that are assigned to that tariff, having regard to:(1) the type and nature of those retail customers; and(2) the information provided to, and the consultation undertaken with, those retail customers.	TSS: section 3; section 4.3–4.7; and appendix D
6.18.5(j)		(j) A tariff must comply with the Rules and all applicable regulatory instruments.	Noted

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