

# Revised Tariff Structure Statement

Regulatory Control Period

1 July 2019 to 30 June 2024

Tasmanian Networks Pty Ltd
Tasmanian Distribution Tariff Structure Statement
Regulatory Control Period: 1 July 2019 to 30 June 2024

Tasmanian Networks Pty Ltd ABN 24 167 357 299 PO Box 606 Moonah TAS 7009

Enquiries regarding this document should be addressed to:

Leader Regulation PO Box 606 Moonah TAS 7009

Email: <a href="mailto:revenue.reset@tasnetworks.com.au">revenue.reset@tasnetworks.com.au</a>

# **Table of Contents**

1	Introduction	4
	Annual pricing proposals	5
2	Glossary	7
3	Tariff classes, structures and charging parameters for standard control services	9
	What are standard control services?	9
	What charging methods do we use?	9
	Taking time of use into account	10
	Network tariff reform	10
	Our network tariffs and charging structures	13
4	Assignment to network tariff classes	19
	Assignment of existing customers to tariff classes	19
	Assignment of new customers to a tariff class	19
	Reassignment of existing customers to another tariff class	20
	The impact of tariff assignment and reassignment on customers	21
	Objections to proposed assignments and reassignments	22
	Assessing and reviewing the basis on which a customer is charged	22
	Assignment process	23
5	Tariff classes, structures and charging parameters for alternative control services	24
	What are alternative control services?	24
	Tariff classes	24
	Metering, public lighting, and ancillary services	25
	Ancillary services – Quoted services	29
	Contact details	31
6	Compliance	32
Α	ppendix A: Network tariffs for 2019-24	37
Α	ppendix B: Indicative Prices for 2019 – 2024	49
Α	ppendix C: Designing cost reflective tariffs	89
	C.1 Targeting cost reflective tariffs	89
	C.2 Calculating what cost reflectivity looks like	92
	C.3 Designing our new tariffs	95

#### 1 Introduction

Under the National Electricity Rules (the Rules), when lodging a regulatory proposal with the Australian Energy Regulator (AER) distribution network service providers (DNSPs) are also required to submit a proposed tariff structure statement (TSS). The purpose of a TSS is to clearly explain to customers and other stakeholders how a DNSP's tariffs have been developed and how they will be applied during the course of a regulatory control period. The proposed tariff structure statement must be accompanied by an indicative pricing schedule.

This document is TasNetworks' TSS for the five year regulatory control period beginning on 1 July 2019 and ending 30 June 2024. It should be read together with TasNetworks' *Tariff Structure Explanatory Statement* (TSES).

This document sets out the tariff classes, tariff structures and tariff components which TasNetworks intends offering in the 2019-24 regulatory period, the policies and procedures for applying those tariffs, along with indicative prices for each tariff over the five year regulatory period. It also includes indicative charges applying to the metering services that TasNetworks will continue to offer during the 2019-24 regulatory period, as well as public lighting.

The TSES is a more expansive document, providing explanations of our approach to designing and setting tariffs, our objectives in pursuing tariff reform, our reasons for choosing the tariffs which appear in this TSS and how they comply with the Rules. This TSS is, therefore, the embodiment of the Distribution Pricing Strategy articulated in the TSES.

The following table sets out the structure of this TSS.

Chapter	Title	Purpose
2	Glossary	The Glossary provides definitions of some key terms and acronyms used throughout this TSS.
3	Tariff classes, structures and charging parameters for standard control services	This section describes the tariff classes, tariff structures and charging parameters used by TasNetworks for standard control services.
4	Assignment to network tariff classes	This section sets out the procedures that TasNetworks applies when allocating customers to tariff classes.
5	Tariff classes, structures and charging parameters for alternative control services	This section describes the tariff classes, tariff structures and charging parameters used by TasNetworks for alternative control services.
6	Compliance	This section provides a checklist of the requirements in the Rules that this TSS is required to meet.
A	Appendix A: Network tariffs for 2019-24	This section provides a description of the existing and new network tariffs (for standard control services) that will be offered by TasNetworks during the 2019-24 regulatory period.

Chapter	Title	Purpose
В	Appendix B: Indicative Prices for 2019 – 2024	This section sets out indicative prices for standard control services, metering services, public lighting, contract lighting, fee-based services and quoted services for each year in the 2019-24 regulatory period.
С	Appendix C: Designing cost reflective tariffs	This section describes our approach to setting tariffs, including how we calculate and apply total efficient cost and long run marginal cost to each tariff, estimating LRMC, and other associated issues related to setting tariffs

TasNetworks is committed to making customers central in all we do. We have engaged with our customers and a wide range of stakeholders in developing the network tariffs that feature in this TSS. Importantly, the TSES also summarises the views expressed by customers and their advocates during the four years of consultation that have led to the development of this TSS, as well as TasNetworks' responses to that feedback.

This TSS is required to be approved by the AER as part of TasNetworks' distribution determination for the 2019-24 regulatory period. Our price structures and charging parameters will, therefore, also be approved as part of this process.

We are confident that the network tariffs being proposed by TasNetworks in this TSS strike a workable balance between the diverse range of views held by stakeholders about network tariff reform and a range of often competing interests, and that they will meet with the AER's approval and the approval of our customers.

# Annual pricing proposals

In addition to the TSS which we are required to submit every five years, each year we must also submit an annual pricing proposal to the AER (for its approval). Annual pricing proposals detail a range of required information on our tariffs and tariff classes, show how we comply with the Rules and state the amount of revenue we are allowed to recover from our customers. The submission dates for our pricing proposals applying to the period covered by this TSS (2019 to 2024) are shown in the table below.

Table 1 Annual Pricing Proposal Submission Dates

Pricing year	2019-20	2020-21	2021-22	2022-23	2023-24
Pricing proposal lodged	21 May 2019	31 Mar 2020	31 Mar 2021	31 Mar 2022	31 Mar 2023

Our annual pricing proposals will explain how the movements in each of our tariffs between years are consistent with this Tariff Structure Statement. We will aim to set each tariff to be broadly consistent with the indicative pricing levels for that tariff set out in our Indicative Pricing Schedule at Appendix A. Our pricing proposals will demonstrate how each proposed tariff is consistent with the Indicative Pricing Schedule, or explain any material differences.

Each annual Pricing Proposal is supported by a range of guides designed to help external parties, particularly customers and retailers, to understand the development and application of charges for the services we provide. Specifically, the following supports our annual Pricing Proposals:

- Network Tariff Application and Price Guide;
- Metering Services Application and Price Guide;
- Public Lighting Application and Price Guide; and
- Ancillary Services Application and Price Guide.

The guides are updated annually to reflect any changes to our tariffs, including changes to our processes for assigning customers to tariffs.

# 2 Glossary

Term or Abbreviation	Definition or description
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AIC	Average incremental cost
Cost reflective pricing	Pricing which is indicative of the true cost of supplying or providing a service
DER	Distributed energy resources refers to typically small capacity electricity generation and storage devices connected to the distribution network and often sited on customers' premises, such as photovoltaic solar panels, batteries, storage water heaters and electric vehicles.
Distribution network	The assets and services that carry the electricity conveyed from generators by the high voltage transmission system and deliver it to individual consumers at the lower voltages required to operate industrial equipment, lighting and household appliances.
DNSP	Distribution network service provider
DUOS	Distribution use of system
GWh	Gigawatt hour
HV	High voltage
kV	Kilovolt
kVA	Kilovolt-ampere
kW	Kilowatt
kWh	Kilowatt hour
LRMC	Long run marginal cost
LV	Low voltage
NEM	National Electricity Market
NER or the Rules	National Electricity Rules
NUOS	Network Use of System charges (reflecting a combination of TUOS and DUOS)
MVA	Megavolt-ampere
MW	Megawatt
MWh	Megawatt hour
Price signal	Information conveyed to end users of electricity via the prices charged for network services, which provides a signal about the true cost of providing a service and/or the value to the customer of that service, which influences their decisions about their use of electricity.
PRWG	TasNetworks' Pricing reform working group
Retailer	A business that buys electricity from generators through the wholesale electricity market, packages it with transportation (network services) and metering services, and sells it to end users.
Tariff class	A class of retail customers for one or more direct control services who are subject to a particular tariff or particular tariffs.
TASCOSS	Tasmanian Council of Social Services Inc

TEC	Total Efficient Cost
ToU	Time of use
Transmission network	The assets and services that enable large generators, like windfarms and hydro-electric power stations, to transmit the high voltage electrical energy they produce to population centres and major industrial users of electricity.
TSS	Tariff structure statement
TSES	Tariff structure explanatory statement
TUoS	Transmission use of system
Unmetered supply	A connection to the distribution system which is not equipped with a meter and for which the consumption of electricity is estimated. Connections to things like public lights and traffic lights are not normally metered.

# 3 Tariff classes, structures and charging parameters for standard control services

#### What are standard control services?

'Standard control' refers to an approach taken by the AER to the regulation of network charges which involves the use of a cap on the amount of revenue that we are permitted to recover from our customers each year. The AER classifies the generic distribution network services which are relied on by most (if not all) customers, including the provision of complex connections to our distribution network, as standard control services.

The annual revenue allowance applying to our standard control services is recovered through general network charges (network tariffs), and pays for the building, running and maintenance of the electricity distribution network. We apply a service charge to every connection to our network so that every household, business and organisation connected to the network makes a contribution towards the cost of the network service available to them, regardless of how much or how little electricity they use.

Because the amount of revenue we recover from our customers in a given financial/regulatory year through network tariffs is capped by the AER, we cannot recover more or less revenue in total from our customers. This is regardless of variations in customer consumption of electricity or the network tariffs they have been assigned to or, where possible, chosen through their retailer. Each year we reconcile our revenue allowance and the revenue recovered from our customers for that year, and adjust future year prices to account for any difference.

# What charging methods do we use?

When designing network tariffs, there are four general types of tariff components which can be weighted, measured and combined in different ways to provide a wide range of possible tariff structures. Different charging parameters are used to create a complete tariff. These are summarised in the table below.

Table 2 Network tariff components

Component	Description
Service Charge	\$/time period (cents per day charge) which does not change with usage, demand or capacity.
Consumption Charge (usage)	\$/time period (actual usage, for example kWh) based on consumption during the billing period.  Consumption charges may vary with time of day or season, charges are based on the total level of usage within the defined billing period.

Component	Description
Demand Charge	<ul> <li>\$/kW or \$/kVA (actual) based on either:</li> <li>The actual demand within the defined charging windows in a billing period</li> <li>The average of the four highest 30 minute demand periods within the defined charging windows in a billing period.</li> <li>Demand charges may vary with the time of day or season, with charges being based on demand recorded within the defined billing period.</li> </ul>
Specified Demand Charge	\$/kW or \$/kVA (agreed) based on agreed maximum demand for a defined billing period, not actual demand. A customer pays for capacity made available, rather than necessarily used.  Capacity charges may vary with time of day or season, with the charge based on capacity within the defined billing period.

#### Taking time of use into account

In addition to deciding on the components (charges) which make up our various network tariffs, for some tariffs we must also set the time periods that apply to any tariff components which take time of use into account. For most customer classes, these periods typically reflect the level of demand collectively being placed on the electricity network by all customers because, in the long term, the cost of providing the network is driven by having to build and replace the network to adequately cater for peaks in demand.

We set the time periods applying to tariff components with a time of use element by looking at our system load profiles to work out when in the day, week or year our system typically experiences peak loads or capacity constraints. Time can then be divided into peak, shoulder or off-peak periods, and different prices applied to the use of the network during those periods.

In addition to dividing a single 24-hour day into multiple charging windows, time of use periods can also be used to distinguish between electricity usage on weekdays and weekends, as well as different 'seasons' of the year – noting that time of use seasonality may not correspond with the four seasons.

More information about the setting of the time of use periods that will apply in the 2019-24 regulatory period to our network tariffs that incorporate time of use charges is provided in the TSES published in support of this TSS.

#### Network tariff reform

The other factor which is shaping the network tariffs that TasNetworks is offering in the 2019-24 regulatory period and beyond is the need for network tariff reform.

The electricity market in Australia is changing rapidly. The uptake of solar panels, and now battery storage, continues to grow. Our customers aren't just consuming electricity anymore — they're generating it, storing it and supplying it back to the grid. And even though Tasmanian customers enjoy some of the lowest electricity prices in the country, like customers all over Australia they are concerned about their electricity bills.

When it came into being in 2014, TasNetworks inherited a number of network tariffs that were not reflective of the impact that the customers on those tariffs had on the cost of providing and operating the distribution network. This meant that the recovery of those costs was being shifted between tariffs and between different classes of customers, giving rise to cross subsidies.

Since then, there have also been changes to the National Electricity Rules that require us to apply a new, more cost reflective approach to setting our network tariffs and other regulated charges, rather than rely on the flat consumption based charges that have been used for years. Those changes require TasNetworks to base its network tariffs on Total Efficient Cost (**TEC**) and Long Run Marginal Cost (**LRMC**). The means by which we allocate TEC and LRMC to tariff classes and to individual tariffs is explained in the TSES document which is a companion to this TSS.

As a result, since 2014 we have been changing the way we price our services to better reflect the demands that our customers' use of electricity place on the network and to give customers more control over their energy costs. To that end we have been incrementally adjusting and realigning the prices of some of the legacy network tariffs that have been in use for decades, to gradually remove cross subsidies and make them more cost reflective.

In 2017 we made new demand based time of use network tariffs available for residential and small business customers, which offer customers that switch to the new network tariffs, via their retailer, reduced prices at off-peak times but higher prices at peak times.

In TasNetworks' 2018-19 Annual Pricing Proposal we announced two new demand based time of use tariffs (with a start date of 1 December 2018) to give households and small businesses who invest in distributed energy resources (**DER**) like solar panels and batteries new opportunities to control their electricity costs. The AER approved their introduction but in this TSS we are required to again seek the AER's approval in order to embed these new tariffs as part of our suite of network tariffs in the 2019-24 regulatory period and beyond.

The time of use periods used for the new DER tariffs will be the same as for the ToU demand based network tariffs introduced for residential and small business applications in the current regulatory period (2017), as well as the ToU consumption tariff for households and small businesses that were introduced in previous regulatory periods.

For both the new and existing ToU demand tariffs for residential and small business customers, however, we will be changing the way we measure peak demand, by moving from single monthly peaks recorded both in peak and off-peak charging windows to an average of the four highest peaks in the month recorded during peak and off-peak charging windows.

Importantly, from the beginning of the 2019-24 regulatory period, ToU consumption based network tariffs will be applied as the default for new and 'replacement' residential customers, on an opt-out basis. This means that for new residential connections and residential customers who initiate a change to their connection or who have an advanced meter installed, from 1 July 2019 onwards TasNetworks will commence charging the customer's retailer for the customer's use of the network using a ToU consumption network tariff.

Once assigned to a time of use consumption network tariff, for a customer to be assigned to a different network tariff, they will have to opt for a retail tariff through their retailer that incorporates a different network tariff, such as a ToU demand tariff, if that's what they prefer.

#### Variation in trigger for opt-out assignment

In response to TasNetworks' proposal to apply an 'opt out' rather than 'opt in' approach to network tariff reform, in order to accelerate the take up of cost-reflective network tariffs, the AER expressed a strong preference for a change in the way that the 'trigger' for opt out network tariff assignment should work. Specifically, the AER stated a preference for a delay in the case of "end of meter replacements", whereby customers whose meters fail would remain on their current network tariff(s) following replacement of the meter, and only be reassigned to the default ToU consumption based network tariff 12-months after the installation of an advanced meter.

TasNetworks does not believe that the delay proposed by the AER delivers better outcomes for customers. Investigation undertaken by TasNetworks indicates that introducing a delay for what is a very small subset of the customers to which opt-out tariff assignment is intended to apply would give rise to inequitable customer outcomes, while also being unjustifiably costly and inefficient to implement. TasNetworks also does not support another more recent proposal from the AER to apply a 12-month delay to all new and 'replacement' residential customers, not just those that have a faulty meter replaced with an advanced meter. This would run counter to the AER's instruction to accelerate the pace of network tariff reform in Tasmania and risks delaying customers' access to the potential benefits of cost reflective network pricing. As a process which cannot currently be automated, implementation of a 12-month delay would also require significant and unfunded IT development and human resources.

In the interests of ensuring that network tariff reform produces good customer outcomes, TasNetworks, therefore, intends to depart from the AER's instructions in this regard, and will assign customers who have a failed meter replaced with an advanced meter to a cost reflective network tariff, effective immediately from the installation of the new meter. Like the residential customers with new or modified connections who, from 1 July 2019, will also be assigned to a ToU consumption network tariff as the default tariff, customers who have a failed meter replaced with an advanced meter will still be able to exercise their right to opt out of the network tariff, through their retailer.

We believe that this will provide the customers involved with earlier access to the potential benefits of cost reflective network pricing, particularly in terms of the greater control it affords over their energy bills by being able to vary time of use, rather than just consumption, in order to reduce their bills. We also believe that this course of action is more consistent with the AER's desire to accelerate the pace of network tariff reform in Tasmania.

TasNetworks' position on this matter is explained in more detail in the TSES that accompanies this TSS.

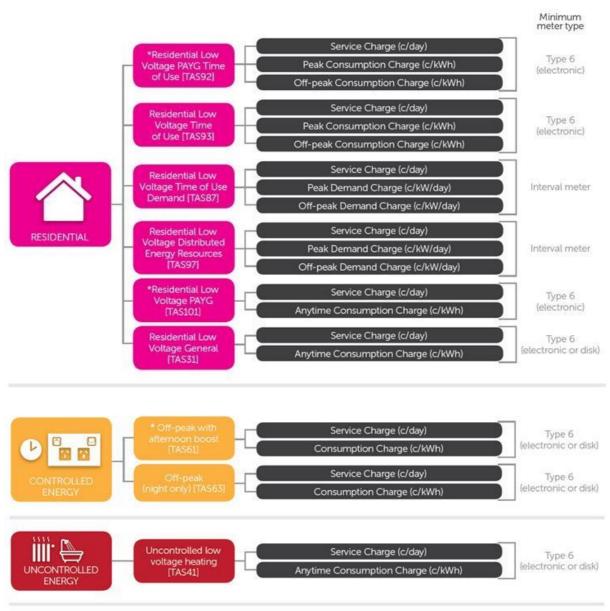
Small business customers will continue to access ToU consumption tariffs on an opt-in basis during the 2019-24 regulatory period, as they do currently, with demand based ToU network tariffs also available on an opt-in basis for both small businesses and residential customers through their retailer.

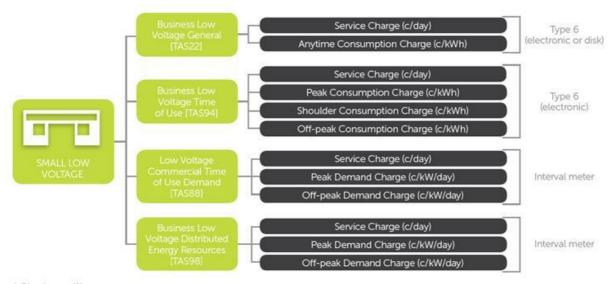
# Our network tariffs and charging structures

The following diagram (Figure 1) provides a summary of the tariffs, tariff structures and charging parameters that will apply to standard control services for each tariff class during the 2019-24 regulatory period. Further detail on our tariffs and customer eligibility is provided in Appendix A: Network tariffs for 2019-24.

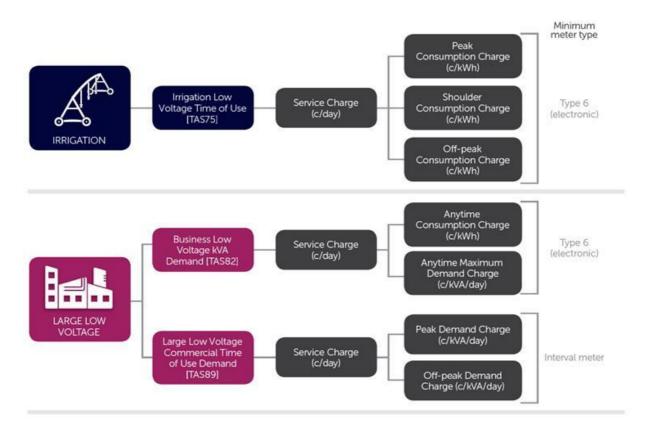
Indicative prices for our tariffs during the 2019 to 2024 regulatory period can be found in the Indicative Pricing Schedule included at Appendix B: Indicative Prices for 2019 – 2024 in this TSS.

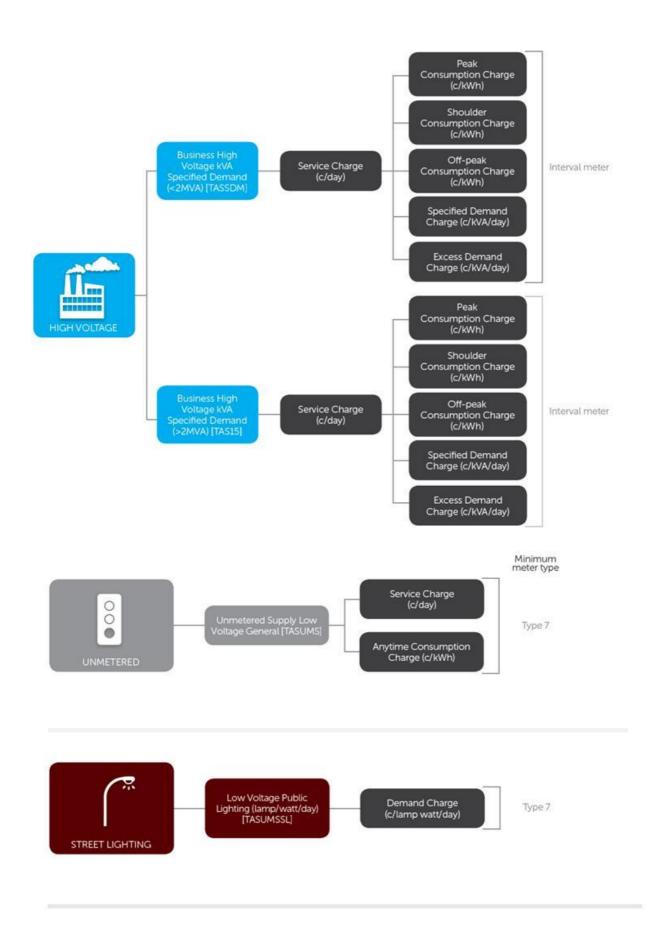
Figure 1 Tariff classes, structures and charging parameters

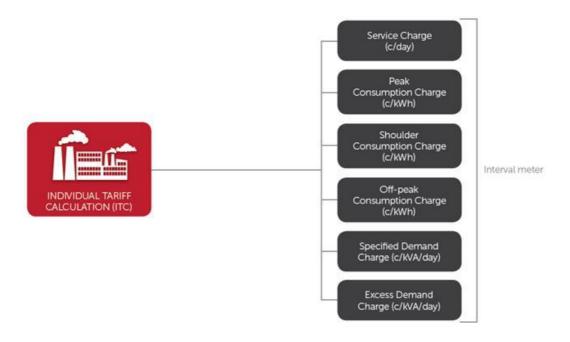




\* Obsolete tariffs







Note: Specific conditions apply. Refer to TasNetworks' Network Tariff Application and Price Guide.

Table 3 Tariffs - charging components

Tariff Class	Network tariff	f Tariff description	Service Charge	ToU Consumption Charge c/kWh			Consumption Charge	Demand Charge c/kW/day	Demand Charge c/kVA/day	Specified Demand (Capacity) Charge c/kVA/day	
	code		c/day	Peak	Shoulder	Off-peak	c/kWh	(peak/off- peak)	(peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand	✓	✓	✓	✓				✓	✓
	TAS15 <sup>1</sup>	Business High Voltage kVA Specified Demand	✓	✓	✓	✓				✓	✓
Irrigation	TAS75	Irrigation Low Voltage Time of Use	✓	✓	✓	✓					
Large Low	TAS82	Business Low Voltage kVA Demand	✓				✓		<b>✓</b>		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	✓						<b>✓</b>		
Small Low	TAS22	Business Low Voltage General	<b>✓</b>				✓				
Voltage	TAS94	Business Low Voltage Time of Use	<b>✓</b>	✓	✓	✓					
	TAS98	Business Low Voltage Distributed Energy Resources	✓					✓			
	TAS88	Low Voltage Commercial Time of Use Demand	<b>✓</b>					✓			
Residential	TAS31	Residential Low Voltage General	<b>✓</b>				✓				
	TAS92	Residential Low Voltage PAYG Time of Use	✓	✓		✓					
	TAS101	Residential Low Voltage PAYG	✓				✓				
	TAS93	Residential Low Voltage Time of Use	✓	✓		✓					
	TAS97	Residential Low Voltage Distributed Energy Resources	✓					✓			
	TAS87	Residential Time of Use Demand	✓					✓			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	✓				✓				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	<b>√</b>				<b>✓</b>				
	TAS63	Controlled Low Voltage Energy – with Night period	✓				✓				

<sup>&</sup>lt;sup>1</sup> DUoS component only, locational TUoS component also applies

Tariff Class	Network tariff	Tariff description	Service Charge	ToU Co	nsumption c/kWh	Charge	Consumption Charge	Demand Charge c/kW/day	Demand Charge c/kVA/day	Cha	and (Capacity) arge A/day
	code		c/day	Peak	Shoulder	Off-peak	c/kWh	(peak/off- peak)	(peak/off- peak)	Specified	Excess
Unmetered	TASUMS	UMS Low Voltage General	✓				✓				
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						✓			
Individual Tariff Calculation (ITC)	TASCUS1										

# 4 Assignment to network tariff classes

Because we have multiple tariff classes, and multiple tariffs within each tariff class, we must have a series of eligibility criteria that determine which tariffs apply to a given type of customer or from which range of tariffs they may choose (through their retailer).

Customers are assigned to at least one of the following tariff classes:

- high voltage (HV);
- irrigation;
- large low voltage (LV);
- small low voltage (LV);
- residential;
- uncontrolled energy;
- controlled energy;
- unmetered;
- street lighting; and
- individual tariff calculation (ITC).

The following sections set out the policies and procedures that we adhere to in assigning customers to tariff classes for both standard control and alternative control services (see Section 5 for more information about alternative control services).

# Assignment of existing customers to tariff classes

A customer will be taken to be assigned to the tariff class to which we were charging that customer immediately prior to 1 July of any regulatory year if they:

- were our customer prior to 1 July that year; and
- continue to be our customer as at 1 July.

# Assignment of new customers to a tariff class

If we become aware that a business, organisation or person is to become our customer, then we determine the tariff class to which the new customer will be assigned by considering one or more of the following factors:

- the forecast/expected nature and extent of the customer's usage, or the typical usage by customers in the same customer class;
- the nature of the customer's connection to the network; and
- whether remotely read interval metering or other similar advanced metering technology has been installed at the customer's premises.

In addition to the above requirements, when assigning a customer to a tariff class we ensure that:

- customers with similar connection and usage profiles are treated equally; and
- customers who have micro embedded generation facilities are not treated any more or less favourably than customers with similar load profiles without such facilities.

#### Assigning a network tariff to a new connection

The process for assigning a network tariff to a new connection is usually instigated by the receipt of a transaction from the metering provider appointed by the customer's retailer to install the customer's meter. That transaction will detail the new meters and registers for the new National Metering Identifier (NMI) assigned to the connection, along with the customer's requested network tariff(s).

For each NMI TasNetworks validates the customer's eligibility for assignment to the requested tariff(s) against the following set of attributes:

- connection type (high or low voltage)
- metering type (basic, interval or unmetered)
- nominated connection purpose (residential, business, irrigation etc.)

In the case of a high voltage business customer that either the TAS15 or TASSDM network tariff has been nominated, TasNetworks also takes into account the expected maximum demand of the connection when assessing the customer's eligibility to be assigned to the requested network tariff.

If the customer is found not to be eligible for the network tariff nominated by the metering provider, TasNetworks will assign the customer to the alternative tariff deemed the most appropriate based on the above criteria, potentially in consultation with the customer or their retailer.

# Reassignment of existing customers to another tariff class

We may reassign a customer to another tariff class if the existing customer's load characteristics or connection characteristics (or both) change such that it is no longer appropriate for that customer to be assigned to their current tariff class. Should a customer no longer have the same, or materially similar, load or connection characteristics as other customers in the customer's existing tariff class, we may also reassign that customer to another tariff class.

In cases where a tariff class is abolished, we will notify the affected customers of this and reassign them to a new tariff class.

#### Reassigning an existing customer to a different network tariff

Customers may also seek a network tariff reassignment. To do so, they must:

- (a) be eligible for tariff reassignment;
- (b) provide TasNetworks with one month's written notification; and

(c) pay any applicable tariff alteration fee.<sup>2</sup>

A tariff reassignment request initiated by a customer may be made either:

- through the customer's retailer, in which case the retailer notifies TasNetworks via a Service Order Request, or;
- through TasNetworks, where TasNetworks will advise the customer's retailer.

Requests for tariff reassignment are evaluated using the same eligibility criteria used to assess network tariffs requested for new connections.

# The impact of tariff assignment and reassignment on customers

The assignment or reassignment of a residential or small business customer to a particular network tariff does not necessarily translate to a change in the retail electricity tariff applying to that customer. This is because, rather than billing customers directly, TasNetworks – like network operators elsewhere in Australia – charges electricity retailers for their customers' access to and use of the network.

The assignment or reassignment of a customer to a network tariff determines what we charge retailers when we bill them for their customers' connections and the delivery of electricity. The tariff component and prices which most customers see on their bills, however, reflect how their retailer packages its input costs for particular customers, including energy costs, the cost of providing retail services – and network charges.

Reassigning a customer to different network tariff may not, therefore, change the retail tariff applying to the customer, unless the retailer offers a retail tariff underpinned by that network tariff which it can apply to the customer. This is one of the reasons that we are working closely with retailers to encourage them to base some of their retail tariffs for residential and small business customers on some of our newer time of use consumption and demand based tariffs. This will ensure that our more cost reflective network price signals actually reach end users.

For example, Aurora Energy has been offering retail standing offers to residential and small business customers since July 2016 which are based on consumption based time of use network tariffs (TAS93 and TAS94 respectively) and since then, more than 3,000 residential customers and over 4,000 small businesses have made the switch to these two retail tariffs. This means that there are now 7,000 low voltage customers on more cost reflective network pricing than there were two years ago.

Customers who are reassigned to another network tariff must remain on the 'new' tariff for a minimum of 12 months, unless otherwise agreed with TasNetworks. This condition prevents customers from taking advantage of seasonal variations in both their load profile and network tariffs by changing network tariffs in order to avoid contributing towards the cost of the network in a way that reflects their usage over a full 12-month cycle.

<sup>&</sup>lt;sup>2</sup> TasNetworks' fee-based services tariffs for tariff alterations are discussed in TasNetworks' *Ancillary Services*– *Fee Based Services Application and Price Guide*.

#### Objections to proposed assignments and reassignments

Working in conjunction with a customer's retailer, we will notify customers in writing of the tariff class to which they have been assigned or reassigned, prior to the assignment or reassignment occurring. Any notification will inform the customer that they may request further information from us and that they may object to the proposed assignment or reassignment.

If we receive a request for further information about a tariff assignment or reassignment from a customer, then we will provide such information unless we consider the requested information is confidential.

The notices we provide to customers about tariff assignments or reassignments will:

- include a copy of our internal procedures for reviewing objections and a link to where they can find such information on our website;
- inform the customer that if an objection is not resolved to their satisfaction then they are entitled to escalate the matter to the Energy Ombudsman Tasmania; and
- advise the customer that if their objection is not resolved to their satisfaction after escalating the matter to the Energy Ombudsman Tasmania, then they are entitled to seek a decision by the AER via the dispute resolution process available under Part 10 of the National Electricity Law.

If a customer makes an objection to us about a proposed tariff assignment or reassignment, we will conduct a reassessment of the customer's circumstances against the criteria used to assign customers to a tariff class (see above), and notify the customer in writing of our decision and the reasons for that decision.

# Assessing and reviewing the basis on which a customer is charged

There are three ways a customer can be assigned to a tariff which we explain below:

- 1. The customer is initially assigned to a tariff based on the nature of their use, connection and metering characteristics.
- 2. We may initiate a reassignment if a customer's nature of use, connection or metering characteristics change.
- 3. A customer's retailer can request a change in tariff. The trigger for such a request is often a customer requesting a change to their retail tariff (e.g. the customer requests a change to a demand based time of use retail tariff).

#### TasNetworks initiated reassignment

We review the assignment of customers to our tariff classes as part of the annual process of developing tariffs for regulatory approval. We have set procedures and criteria<sup>3</sup> to determine when it may be appropriate for a customer to be reassigned to a different tariff or tariff class, or where the basis of the customer's demand charges should be amended. This change is usually the result of changes in the customer's energy consumption, expected maximum demand or connection characteristics. These procedures ensure the customer's underlying tariff is appropriate to their assumed usage or load profile.

#### Retailer initiated reassignment

In addition to this annual review process, customers (or a customer's retailer) can request that we review and change a tariff in the event of variation to the customer's usage or load profile. Provided we agree to a change in tariff, this change can take effect during a regulatory year. We use the procedures and criteria discussed above to determine if it is appropriate to change the tariff assigned to a customer.

The charging parameters within our tariffs do not alter as the customer's usage or load profile varies. Should a customer's usage or load profile vary, the customer may either manage their usage in response to the price signals inherent in the tariff, or request to be reassigned to an alternative tariff where applicable.

This provides an effective system for assessing and reviewing the basis on which a customer is charged.

# **Assignment process**

The assignment processes are also discussed in the *Network Tariff Application and Price Guide*; *Metering Services Application and Price Guide*; *Public Lighting Application and Price Guide*; and *Ancillary Services Application and Price Guide*.

These guides are updated annually to reflect any changes to our tariffs and charges approved by the AER through the annual pricing proposal process, and are available on our website at:

http://www.tasnetworks.com.au/our-network/network-revenue-pricing/distribution-fees-and-tariffs

<sup>&</sup>lt;sup>3</sup> See our Network tariff application and price guide

# 5 Tariff classes, structures and charging parameters for alternative control services

#### What are alternative control services?

The term 'alternative control services' refers to services where the costs – and the associated benefits from the service – can be directly attributed to a particular customer (for example, where a customer requests a service). For these services, instead of setting a revenue cap, the AER caps the prices that can be charged or sets the input costs that can be used by TasNetworks to quote jobs. TasNetworks' alternative control services include regulated metering services for small customers<sup>4</sup>, ancillary services (quoted services and fee based services), and public lighting.

Further information regarding our Alternative Control Service offerings is provided in our *Alternative Control Service Descriptions Paper (TN094)*, appended as an attachment to our Regulatory Proposal submitted to the AER in January 2018.

#### Tariff classes

Our tariff classes for alternative control services reflect the nature of the services provided, with similar services being grouped together. This approach is economically efficient, in that the tariffs reflect the cost of the services and the characteristics of the customer using the service do not impact the cost of the service. The table below defines each of our tariff classes for alternative control services, which are consistent with those approved by the AER for our 2017-19 TSS.

Table 4 Tariff classes for alternative control services

Tariff class	Definition
Metering	Metering services are those services provided with respect to the provision, installation and maintenance of standard meters installed prior to December 2017 and the associated services provided to retail customers.
	This includes the metering services provided to small customers (using type 6 and type 7 meters) in our role as metering provider and meter data provider.
Public lighting	Public lighting services are those services for:
	the provision, construction and maintenance of our public lighting assets; and
	the maintenance of public lighting assets owned by customers (contract lighting).
	This includes the provision, construction and maintenance of new and/or emerging public lighting technology services.

<sup>&</sup>lt;sup>4</sup> Type 6 and 7 meters

Tariff class	Definition
Ancillary services - Fee based services These services include for example, basic connection services	Fee based services are provided for the benefit of a single customer rather than uniformly supplied to all customers. These services are provided at the request of a third party and are typically initiated by way of a service request received from a retailer.
Ancillary services - Quoted services Includes for example, asset movements at a customer's request	Quoted (non-standard) services are those services where the nature and scope of the service is specific to individual customer's needs, and varies from customer to customer. Consequently, the cost of providing the services cannot be estimated without first knowing the customer's specific requirements. It is not possible, therefore, to set a generic total fixed fee in advance for these services.  Requests for quoted services may be received from a customer or from a retailer on behalf of a customer.

Further information on the tariffs and charges for each of these tariff classes is provided in the following sections.

#### Metering, public lighting, and ancillary services

Our approach to setting the tariffs for the 2019-24 regulatory period is consistent across metering, public lighting, and ancillary services (both fee based services and quoted services).

#### Metering services overview

Metering services are provided by TasNetworks to all customers with Type 6 metering installations and form a component of the charges we levy. The charges for metering service are split between a capital charge which recovers the cost of our regulated metering fleet and a non-capital charge, which covers the cost of reading the meter and collecting the metering data.

From 1 December 2017, the nature of our involvement in the provision of meters for residential and small business customers has changed. The change is a result of alterations made by the AEMC to the regulatory framework applying to metering services.

As a result of those changes, from 1 December 2017 each customer's retailer is responsible (through their chosen Metering Co-ordinator) for providing and maintaining advanced meters on a new and replacement basis. TasNetworks will continue to support the existing fleet of Type 6 meters during the 2019-24 TSS period, but will not be involved with the provision or reading of newly installed advanced meters.

The AER has determined that the provision of metering services will be classified in accordance with the type of meter and the functionality that it provides, and has assigned these meters into different meter classes.

The metering tariffs we are proposing to offer our customers and the indicative charges are set out in the Indicative Pricing Schedule in Appendix B: *Indicative Prices for 2019 – 2024*.

#### **Public lighting services overview**

Only the alternative control service component of public lighting tariffs is discussed in this section. This is because the final tariff for the provision of public lighting services comprises a charge for the provision of a standard control service as well as an alternative control service. The delivery of electricity to public lights requires the use of the distribution network, which is a standard control service, while the provision, construction and maintenance of the lighting asset is classified by the AER as an alternative control service.

The term "Public lighting services" applies to:

- the provision, construction, and maintenance of our public lighting assets; and
- the maintenance of public lighting assets owned by customers (contract lighting).

This includes the provision, construction, and maintenance of new/emerging public lighting technology.

Public lighting services exclude:

- the alteration and relocation of public lighting assets, which are provided on an ancillary service basis (i.e. as a quoted service); and
- the installation of contract lights, which is undertaken as an ancillary service (quoted service).

The provision of public lighting services will be categorised according to the type of lighting fixture that is provided and whether we own that light.

Those lights that are owned by us are referred to as public lighting, while lights that are owned by the customer are referred to as contract lighting.

TasNetworks' first regulatory proposal, for the 2017-19 regulatory period, was submitted to the AER in January 2016, and our public lighting service arrangements and pricing are largely a continuation of the agreements and charges that were previously offered by Aurora Energy in its capacity as a DNSP. Since then, thorough analysis of the available asset and expenditure data, as well as a review of the time and resources being expended by TasNetworks on the delivery of public lighting services, has revealed that the public lighting prices currently on offer fall significantly short of full cost recovery. Accordingly, to be cost reflective, the prices charged for public lighting services need to increase significantly.

Introducing a significant step change in prices would, however, be inconsistent with our strategy of providing predictable and sustainable prices for our customers. TasNetworks is proposing, therefore, to use a gradual glide path for public lighting prices spanning the 2019-24 and 2024-29 regulatory periods, to transition public lighting to fully cost reflective pricing. For example, this will see (alternative control) public lighting charges for LED14W lights increasing by about 15 per cent in 2019-20 and then at a rate of CPI plus about 1.7 per cent for the next four years. The revenue foregone during this transitional phase will be absorbed by TasNetworks, and will not be passed on to other customers.

The public lighting services we are proposing to offer our customers and indicative charges are set out in the Indicative Pricing Schedule in Appendix B: Indicative Prices for 2019 - 2024.

#### Ancillary services - Fee based services overview

These services are provided upon request and are typically initiated by way of a service request from a retailer. The fee-based services we propose to provide in the forthcoming regulatory period include but are not limited to:

- energisation;
- de-energisation;
- re-energisation;
- meter testing;
- basic connections;
- supply abolishment removal of meters and service connection; and
- other miscellaneous services.

In the forthcoming regulatory period, the Power of Choice metering reforms mean that meter alterations and renewable energy connections will no longer be offered as a service.

We are proposing to include under connection services an additional service for providing temporary disconnection and reconnection in response to a retailer's request for an outage. The following additional services will also appear as 'miscellaneous services', to reflect the AER's updated Framework and Approach paper<sup>5</sup>:

- creation of National Metering Identifier (NMI);
- statutory right access prevented;
- network tariff change (back office);
- emergency maintenance contestable meters;
- meter recovery and disposal; and
- the fitment of 'tiger tails'.

A full description of our fee-based services is provided in the *Alternative Control Services Descriptors Paper (TN094)* and indicative charges are set out in the Indicative Pricing Schedule in Appendix B.

#### Tariff development process

Metering, public lighting, and ancillary services' price caps are calculated for each year of a regulatory period using a price control mechanism approved by the AER. The formula for our 2019-24 revenue determination is unchanged from the formula approved for our 2017-19 TSS and is as follows:

$$\overline{p}_t^i = \overline{p}_{t-1}^i \times (1 + CPI_t) \times (1 - X_t^i) + A_t^i$$

Table 5 details the price cap parameters that apply when calculating the tariffs.

<sup>&</sup>lt;sup>5</sup> AER, Framework and approach, TasNetworks electricity transmission and distribution, Regulatory control period commencing 1 July 2019, July 2017.

Table 5 Price cap calculation methodology

Component	Comment
$\overline{p}_t^i$	The cap on the price of service i in year t
$p_t^i$	The price of service i in year t. The initial value is to be decided in the determination
$\overline{p}_{t-1}^i$	The cap on the price of service i in year t-1
t	The regulatory year
$\Delta CPI_t$	The annual percentage change in the ABS consumer price index (CPI) for All Groups, Weighted average of Eight Capital Cities from the December quarter in year t-2 to the December quarter in year t-1.
$X_t^i$	The X-factor for service i in year t
$A_t^i$	The sum of any adjustments for service I in year t

This means prices move from year to year by indexing the previous year's prices by inflation and other adjustments including the X-factor.

#### Indicative prices for alternative control services

Indicative prices for the 2019-24 regulatory period have been calculated using the price cap formula above for each year. Indicative prices for metering, public lighting and fee based services' tariffs for 2019-24 are set out in Appendix B: *Indicative Prices for 2019 – 2024*.

The Indicative Pricing Schedule is revised and submitted with the Pricing Proposal each year.

#### Tariff structures and parameters

The following table details the tariff structures for metering services, public lighting and ancillary services - fee based services.

Table 6 Tariff structures for alternative control services

Service	Recovery
Metering services	Recovered through a fixed daily capital charge and an operating charge, reflective of the nature of the costs which are fixed for each customer (that is, the customer has little ability to act to mitigate the cost). Should a customer receive an advanced meter the operating (non-capital) charge will cease to be applied to that customer while their retailer will continue to be billed for the capital charge for the duration of the forthcoming regulatory period.

Service	Recovery
Public lighting	Recovered through a fixed daily charge, reflecting the fixed nature of the costs of providing, replacing and maintaining these assets.
Ancillary services – fee based services	Recovered through a fixed charge, charged on the basis of service provision. This is cost reflective as the costs of these type of jobs can be easily assigned to the customer for which they are being provided, and the cost per job is reasonably homogenous.

#### Ancillary services - Quoted services

Requests for quoted (non-standard) services may be received from a customer or retailer on behalf of a customer. These services cannot be costed in advance with a reasonable degree of certainty.

We provide a range of non-standard services on a quoted basis including, but not limited to:

- removal or relocation of our assets at a customer's or third party request;
- services that are provided at a higher standard than the standard service, due to a customer's request for us to do so;
- services that are provided through a non-standard process at a customer's request (for example, where more frequent meter reading is required);
- network safety services;
- customer vegetation defect works;
- connection application services (other than those provided as ancillary services fee based services);
- design work for a new connection;
- access permits, oversight and facilitation;
- notices of arrangement;
- network related property services;
- planned Interruption customer requested; and
- provision of training to third parties for network related access.

#### Charging arrangements for quoted services

The price caps for providing quoted services are built up based on standard cost inputs into the particular service, that is, labour time and rates, materials, contractors and other costs, with overheads apportioned to the work. This cost build up reflects the steps required to set prices for the diverse range of activities provided under quoted services, and is reflected in the following formula we propose to apply:

Price = Labour + Contractor Services + Materials + Margin

The following table details the price cap parameters that apply when calculating the tariffs.

Table 7 Price cap calculation methodology

Component	Comment
Labour	Consists of all labour costs directly incurred in the provision of the service which may include labour on-cost, fleet on-costs and overhead.  Labour is escalated annually by the formula provided below.
Contractor services	Reflects all costs associated with the use of external labour including overheads and any direct costs incurred. The contracted services charge applies the rates under existing contractual arrangements. Direct costs incurred are passed on to the customer.
Materials Reflects the cost of materials directly incurred in the provision service, material storage and logistics on-costs and overheads.	
Margin is an amount equal to 5.51 per cent <sup>6</sup> of the total costs of la contractor services and materials.	

We also calculate price caps for the labour rates applying to quoted services in accordance with a formula given by the AER:

$$(1 + \Delta CPI_t)(1 - X_t^i)$$

The following table provides details of the labour rate cap calculations that have been used to prepare quoted services tariffs.

Table 8 Price cap on labour rate

Component	Comment
<b>∆</b> CPI	The annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the December quarter in year t-2 to the December quarter in year t-1.
$X^{i}_{t}$	The X-factor for service I in year t.

This means prices move from year to year by indexing the previous year's component prices for inflation and for the X-factor.

<sup>&</sup>lt;sup>6</sup> Aligned with our proposed distribution Rate of Return

#### Indicative prices for quoted services

The labour rates used in determining quoted services are set out in the Indicative Pricing Schedule in Appendix B. The labour rates and the formula for application of quoted services are the only element that is regulated. Other costs are passed through to customers at cost, and a margin is added to the total cost of the service delivery. The inclusion of a margin is consistent with the principle of competitive neutrality, which is that publicly owned businesses should not enjoy a competitive advantage simply because they are publicly owned.

While many of our quoted services are not currently subject to competition, this situation may change over time. The inclusion of a modest margin will assist in promoting the development of competition and ensure fair pricing across all our services.

This approach has been taken because we are unable to provide a full range of indicative prices for quoted services, as by their nature these services are dependent on a customer's specific requirements and cost inputs may vary significantly. It is not feasible, therefore, to set a generic total fixed fee in advance for these services.

#### **Contact details**

If you are uncertain about the network pricing process or the pricing arrangements that may be applicable to your circumstances you are encouraged to contact us at:

Leader Regulation PO Box 606 Moonah TAS 7009

E-mail: revenue.reset@tasnetworks.com.au

# 6 Compliance

The Rules require us to comply with a range of requirements when submitting a TSS to the AER. This section presents each compliance requirement and how this Tariff Structure Statement addresses each requirement.

Table 9 TSS compliance matrix

Clause		Compliance
6.8.2(d1)	The proposed tariff structure statement must be accompanied by an indicative pricing schedule.	We have prepared an Indicative Pricing Schedule which is available on page 49 of this TSS in <i>Appendix B: Indicative Prices</i> for 2019 – 2024.
6.8.2(d2)	The proposed tariff structure statement must comply with the pricing principles for direct control services.	This TSS complies with the Rules' requirements regarding pricing principles for direct control services. Further explanation is provided in Table 10 below ( <i>Pricing Principles Compliance</i> ).
6.18.1A	A tariff structure statement must include the following elements:  (1) the tariff classes into which retail customers for direct control services will be divided during the relevant regulatory control period;	See Section 3 ( <i>Tariff classes, structures and charging parameters for standard control services</i> ) in relation to standard control services, as well as Section 3 of TasNetworks' TSES.  See Section 5 ( <i>Tariff classes, structures and charging parameters for alternative control services</i> ) in relation to alternative control services, as well as Section 7 of TasNetworks' TSES.
	(2) the policies and procedures TasNetworks will apply to assigning retail customers to tariffs or reassigning retail customers from one tariff to another (including any applicable restrictions);	See Section 4 (Assignment to network tariff classes) and Section 5 of TasNetworks' TSES.
	(3) the structures for each proposed tariff;	See Figure 1 (Tariff classes, structures and charging parameters) and Table 3 (Tariffs - charging components) in Section 3 (Tariff classes, structures and charging parameters for standard control services) in relation to network tariffs.  See Table 6 (Tariff structures for alternative control services) in Section 5 (Tariff classes, structures and charging parameters for alternative control services) in relation to metering, public lighting and fee based ancillary services.  See Section 5 in relation to quoted services, under the heading "Charging arrangements for quoted services" (page 29).

Clause			Compliance
			Appendix A: Network tariffs for 2019-24 provides detailed descriptions of existing and new tariffs for standard control services.
		ing parameters proposed tariff;	See Figure 1 (Tariff classes, structures and charging parameters) in Section 3 (Tariff classes, structures and charging parameters for standard control services). The same information is also available in TasNetworks' TSES, in Section 3.  See Table 6 (Tariff structures for alternative control services) in Section 5 (Tariff classes, structures and charging parameters for alternative control services) in relation to metering, public lighting and fee based ancillary services. Section 6 of TasNetworks' TSES contains similar information.  See Section 5 in relation to quoted services under the heading "Charging arrangements for quoted services"  Appendix B: Indicative Prices for 2019 – 2024 for standard control services, public and contract lighting services, fee-based services, quoted services and metering services.
	approach TasNetwo setting ea pricing pr relevant r	orks will take in ach tariff in each oposal during the regulatory control accordance with	See section 2 and section 4 of TasNetworks' TSES, entitled  Distribution pricing strategy and Network tariff setting process respectively.  Appendix C: Designing cost reflective tariffs explains our compliant pricing approach.
6.18.1A(b)	A tariff structurust comply was principles for deservices.	ith the pricing	The statement complies with the pricing principles. For a detailed explanation, please refer to Table 10 ( <i>Pricing Principles Compliance</i> ).
6.18.1A(e)	regulatory con- indicative price determined in	npanied by an ng schedule , for each tariff atory year of the trol period, the	We have prepared an Indicative Pricing Schedule which is available on page 49 of this TSS in <i>Appendix B: Indicative Prices</i> for 2019 – 2024.

Table 10 Pricing Principles Compliance

Clause	Pricing principle	Compliance
6.18.5(e)	For each tariff class, the revenue expected to be recovered must lie on or between:  • an upper bound representing the stand alone cost of serving the retail customers who belong to that class; and  • a lower bound representing the avoidable cost of not serving those retail customers.	Appendix C: Designing cost reflective tariffs explains our compliant pricing approach.
6.18.5(f)	<ul> <li>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: <ul> <li>the costs and benefits associated with calculating, implementing and applying that method as proposed;</li> <li>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</li> <li>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.</li> </ul> </li></ul>	Appendix C: Designing cost reflective tariffs explains our compliant approach to pricing, along with Section 4 of TasNetworks' TSES (Network tariff setting process). Table 3 (Issues raised by our customers and our responses) in section 4 (Network tariff setting process) of TasNetworks' TSES explains the jurisdictional requirement that distribution network tariffs for all small customers of a particular class are required to be uniform, regardless of where in mainland Tasmania the customer is supplied.
6.18.5(g)	<ol> <li>The revenue expected to be recovered from each tariff must:</li> <li>reflect the Distribution Network Service Provider's total efficient costs of serving the retail customers that are assigned to that tariff;</li> <li>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</li> <li>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).</li> </ol>	Appendix C: Designing cost reflective tariffs explains our compliant pricing approach, including our compliance with subparagraph 3.  The sumproduct of our indicative prices in Appendix B: Indicative Prices for 2019 – 2024 of this TSS and our demand/consumption forecasts has been set to equal the net present value of the building block revenue requirements set out in TasNetworks' regulatory proposal.

Clause	Pricing principle	Compliance
6.18.5(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:  • 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);  • the extent to which retail customers can choose the tariff to which they are assigned; and  • the extent to which retail customers are able to mitigate the impact of changes in tariffs through their usage decisions.	Our compliance with this principle has been ensured through our approach to customer engagement and how we have reflected the outcomes of this in:  • our approved 2017-19 TSS that commenced our gradual transition approach to legacy tariff rebalancing which this TSS continues to execute  • our updated approach to measuring demand for our demand TOU tariffs  • our updated approach to opt out and opt in tariff assignments.  Table 3 (Issues raised by our customers and our responses) and Table 4 (Issues raised by stakeholders with the AER) in section 4 (Network tariff setting process) of TasNetworks' TSES discusses a range of issues raised by customers in relation to the impact of changes in tariffs on customers.
6.18.5(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:  • the type and nature of those retail customers; and  • the information provided to, and the consultation undertaken with, those retail customers.	We have retained the tariff structures previously approved by the AER in our 2017-19 TSS, and updated our approach to measuring demand for our residential and small business demand TOU tariffs to reflect PRWG and AER feedback.  Table 3 (Issues raised by our customers and our responses) of TasNetworks' TSES discusses a number of issues raised by customers in relation to tariff reform, including the tariff design trade-offs between complexity and cost reflectivity, simplicity and fairness.

Clause	Pricing principle	Compliance
6.18.5(j)	A tariff must comply with the Rules and all applicable regulatory instruments.	Our existing tariffs comply with this principle, and our new DER tariffs have been designed for compliance as explained in Appendix C (see <i>C.3 Designing our new tariffs</i> ).

## Appendix A: Network tariffs for 2019-24

The table below provides a description of the existing and new tariffs.

Table A1: Network tariffs for Standard Control Services

Network Tariff class	Network Tariff	Description				
High Voltage	Business High Voltage kVA Specified Demand (TASSDM)	wi Th	This network tariff is for installations taking supply at high voltage, with an expected any time maximum demand of less than 2 MVA.  There are no restrictions on the use of the supply (i.e. the supply may be used for general power, heating, water heating, etc.).			
			ne customer must supply their ov stallations connected on this net		and switchgear for	
		No later than two months prior to the commencement of each financial year, customers on this network tariff are required to an agreement on the level of specified demand which will appear their electrical installation. Once agreed, this value is used in calculation of demand charges for the following financial year. This network tariff may not be used in conjunction with any onetwork tariff offering.  This network tariff structure includes seasonal consumption time of use charging components, periods as shown below.		equired to reach ch will apply to s used in the incial year. with any other umption (kWh)		
			Time periods	Summer (1 Oct – 31 Mar)	Winter (1 Apr – 30 Sep)	
			Week Day (07:00 – 22:00) (Monday – Friday)	Shoulder	Peak	
			Weekend Day (07:00 – 22:00) (Saturday and Sunday)	Off-peak	Shoulder	
			Any Day (22:00 – 24:00) (Monday – Sunday)	Off-peak	Off-peak	
			Any Day (0:00 – 07:00) (Monday – Sunday)	Off-peak	Off-peak	

Network Tariff class	Network Tariff	0	Description							
	Business High Voltage kVA Specified Demand >2MVA		This network tariff applies to customers with an anytime maximum demand in excess of 2.0 MVA that are supplied directly from our distribution network with none of our assets beyond the connection point.							
	ii N y a ii n	1	The customer must supply its on this connected on this		switchgear for HV					
		ì	No later than two months prior to the commencement of a financial year, customers on this network tariff are required to reach an agreement about the "Specified Demand" for their electrical installation. Once agreed this value is used in the calculation of network use of system charges for the following financial year.							
							A site connected to our distribution network with this network tarinot eligible for any other network tariff offering.			
		1	This network tariff structure inc ime of use charging componer							
		Time periods	Summer (1 Oct – 31 Mar)	Winter (1 Apr – 30 Sep)						
							Week Day (07:00 – 22:00) (Monday – Friday)	Shoulder	Peak	
				Weekend Day (07:00 – 22:00) (Saturday and Sunday)	Off-peak	Shoulder				
			Any Day (22:00 – 24:00) (Monday – Sunday)	Off-peak	Off-peak					
						Any Day (0:00 – 07:00) (Monday – Sunday)	Off-peak	Off-peak		

Network Tariff class	Network Tariff	Description				
Irrigation	Irrigation Low Voltage Time of Use (TAS75)	This low voltage network tariff installations that are used prim This network tariff may not be network tariff offering.  This network tariff structure incidence of use charging componer	arily for the irrigat used in conjunction	on with any other		
		Time periods	Summer (1 Oct – 31 Mar)	Winter (1 Apr – 30 Sep)		
		Week Day (07:00 – 22:00) (Monday – Friday)	Shoulder	Peak		
		Weekend Day (07:00 – 22:00) (Saturday and Sunday)	Off-peak	Shoulder		
		Any Day (22:00 – 24:00) (Monday – Sunday)	Off-peak	Off-peak		
		Any Day (0:00 – 07:00) (Monday – Sunday)	Off-peak	Off-peak		
Large Low Voltage	Business Low Voltage kVA Demand (TAS82)	This network tariff is for installations taking low voltage multi-phase supply. There are no restrictions on the use of the supply (i.e. the supply may be used for general power, heating, water heating, etc.)  This network tariff may not be used in conjunction with any other network tariff offering.				

Network Tariff class	Network Tariff	Description			
	Large Low Voltage Commercial Time of Use Demand (TAS89)	restrictions on the use of the supply (i.e. the supply may be used fo general power, heating, water heating, etc.).  This network tariff may not be used in conjunction with any other network tariff offering.  This network tariff structure includes demand based (kW) time of u charging components, periods as shown below.			e no used for other
			Time periods	Tariff rate	
			Week day (07:00 – 10:00) (Monday – Friday)	Peak	
			Week day (10:00 – 16:00) (Monday – Friday)	Off-peak	
			Week day (16:00 – 21:00) (Monday – Friday)	Peak	
			Week day (21:00 – 07:00) (Monday – Friday)	Off-peak	
			Weekend day (00:00 – 24:00) (Saturday – Sunday)	Off-peak	
Small Low Voltage	Low Voltage Commercial Time of Use Demand (TAS88)	either wholl no restrictio for general p may not be This networ	k tariff is for low voltage install y or principally as Private Resid ons on the use of the supply (i.e power, heating, water heating, used in conjunction with any of k tariff structure includes dema mponents, periods as shown be	lential Dwellings.  the supply may etc.). This netw ther network tar and based (kW) t	There are be used ork tariff offering.
			Time periods	Tariff rate	
			Week day (07:00 – 10:00) (Monday – Friday)	Peak	
			Week day (10:00 – 16:00) (Monday – Friday)	Off-peak	
			Week day (16:00 – 21:00) (Monday – Friday)	Peak	
			Week day (21:00 – 07:00) (Monday – Friday)	Off-peak	
			Weekend day (00:00 – 24:00) (Saturday – Sunday)	Off-peak	

Network Tariff class	Network Tariff	Description			
	Business Low Voltage Distributed Energy Resources (TAS98)	This network tariff is for low voltage installations that are not used either wholly or principally as Private Residential Dwellings, where electricity storage, generation and/or electricity management devices — collectively referred to as "distributed energy resources" (DER) have been deployed behind the meter. There are no restrictions on the use of the supply (i.e. the supply may be used for general power, heating, water heating, etc.). This network tariff may not be used in conjunction with any other network tariff offering.  This network tariff structure includes demand based (kW) time of use charging components, as shown below.			
			Time periods	Tariff rate	
			Week day (07:00 – 10:00) (Monday – Friday)	Peak	
			Week day (10:00 – 16:00) (Monday – Friday)	Off-peak	
			Week day (16:00 – 21:00) (Monday – Friday)	Peak	
			Week day (21:00 – 07:00) (Monday – Friday)	Off-peak	
			Weekend day (00:00 – 24:00) (Saturday – Sunday)	Off-peak	
	Business Low Voltage General (TAS22)	that are not Dwellings. There are no	k tariff is for low voltage instal used either wholly or principa o restrictions on the use of the general power, heating, water	ally as Private Res	idential
	Business Low Voltage Nursing Homes (TAS34)	registered a	k tariff applies to low voltage i s aged care facilities. There ar y (i.e. the supply may be used ng, etc.).	e no restrictions	on the use
		Aurora Ener network ope	k tariff was made obsolete by gy, in its capacity as Tasmania erator, and has not been availa 2-13. This tariff will be abolish	's former distribu able to new custo	ition omers since

Network Tariff class	Network Tariff	Descripti	on			
	General Network – Business, Curtilage (TASCURT)	This network tariff applies to low voltage rural installations which have a single connection point but require more than one meter due to site layout.  The single connection point must supply an installation qualifying for, and being supplied under network tariff, Business Low Voltage General (TAS22).  This network tariff was made obsolete by TasNetworks' predecessor, Aurora Energy, in its capacity as Tasmania's former distribution network operator, and has not been available to new customers since at least 2012-13. This tariff will be abolished from 1 July 2019.				
	Business Low Voltage Time of Use (TAS94)		This network tariff is available for low voltage installations that are no Private Residential Dwellings.  There are no restrictions on the use of the supply (i.e. the supply may be used for general power, heating, water heating, etc.).  This network tariff structure includes consumption (kWh) time of use charging components, periods as shown below.			
			Time periods	Tariff rate		
			Week Day (07:00 – 22:00) (Monday – Friday)	Peak		
			Weekend Day (07:00 – 22:00) (Saturday and Sunday)	Shoulder		
			Any Day (22:00 – 24:00) (Monday – Sunday)	Off-peak		
			Any Day (0:00 – 07:00) (Monday – Sunday)	Off-peak		

Network Tariff class	Network Tariff	Description			
Residential	Residential Time of Use Demand (TAS87)	This network tariff is for low voltage installations that are premises used wholly or principally as Private Residential Dwellings. There are no restrictions on the use of the supply (i.e. the supply may be used for general power, heating, water heating, etc.). Farm outbuildings may be connected on this network tariff provided that the connection is through the meters of the farm residence.  This network tariff may not be used in conjunction with any other network tariff offering.  This network tariff structure includes demand based (kW) time of use charging components, periods as shown below.			There are to be used couildings connection to other
			Time periods	Tariff rate	
			Week day (07:00 – 10:00) (Monday – Friday)	Peak	
			Week day (10:00 – 16:00) (Monday – Friday)	Off-peak	
			Week day (16:00 – 21:00) (Monday – Friday)	Peak	
			Week day (21:00 – 07:00) (Monday – Friday)	Off-peak	
			Weekend day (00:00 – 24:00) (Saturday – Sunday)	Off-peak	

Network Tariff class	Network Tariff	Description			
	Residential Low Voltage Distributed Energy Resources (TAS97)	This network tariff is for low voltage installations that are premises used wholly or principally as Private Residential Dwellings where electricity storage, generation or electricity management devices — collectively referred to as "distributed energy resources" (DER) — ha been deployed behind the meter. There are no restrictions on the confidence of the supply (i.e. the supply may be used for general power, heating water heating, etc.). Farm outbuildings may be connected on this network tariff provided that the connection is through the meters of the farm residence.  This network tariff may not be used in conjunction with any other network tariff offering.  This network tariff structure includes demand based (kW) time of use charging components, periods as shown below.			where evices – DER) – have s on the use er, heating, on this meters of
			Time periods	Tariff rate	
			Week day (07:00 – 10:00) (Monday – Friday)	Peak	
			Week day (10:00 – 16:00) (Monday – Friday)	Off-peak	
			Week day (16:00 – 21:00) (Monday – Friday)	Peak	
			Week day (21:00 – 07:00) (Monday – Friday)	Off-peak	
			Weekend day (00:00 – 24:00) (Saturday – Sunday)	Off-peak	
	Residential Low Voltage General (TAS31)	that are use There are no be used for Farm outbui	k tariff is for low voltage install d wholly or principally as Priva o restrictions on the use of the general power, heating, water ildings may be connected on the inection is through the meters	te Residential Dv supply (i.e. the s heating, etc.). nis network tariff	vellings. supply may provided
	Residential Low Voltage PAYG (TAS101)	which are us and were su prior to 1 Ju (i.e. the sup etc.).	k tariff applies to low voltage in sed wholly or principally as Priv applied in accordance with a priv ly 2013. There are no restriction ply may be used for general po	vate Residential [ epayment meter ons on the use o ower, heating, wa	Owellings ring product f the supply ater heating,
		network tari This network customers.	iff. k tariff is obsolete and no long	er available to ne	₽W

Network Tariff class	Network Tariff	Description			
	Residential Low Voltage PAYG Time of Use (TAS92)	This network tariff is for low voltage installations at premises which are used wholly or principally as Private Residential Dwellings and are supplied in accordance with a prepayment metering product. There are no restrictions on the use of the supply (i.e. the supply may be used for general power, heating, water heating, etc.).  This network tariff structure includes consumption (kWh) time of use charging components, periods as shown below.			
			Time periods	Tariff rate	
			Week day (07:00 – 10:00) (Monday – Friday)	Peak	
			Week day (10:00 – 16:00) (Monday – Friday)	Off-peak	
			Week day (16:00 – 21:00) (Monday – Friday)	Peak	
			Week day (21:00 – 07:00) (Monday – Friday)	Off-peak	
			Weekend day (00:00 – 24:00) (Saturday – Sunday)	Off-peak	
		This networ customers.	k tariff is obsolete and no long	er available to ne	·w
	Residential Low Voltage Time of Use (TAS93)	premises us There are no be used for Farm outbu connection This networ	k tariff is available for low volt sed wholly or principally as Priv o restrictions on the use of the general power, heating, water ildings may be connected on t is through the meters for the f k tariff structure includes cons mponents, periods as shown b	rate Residential Description of the samply (i.e. the same heating, etc.). This tariff provided farm residence.	wellings. upply may I that the
			Time periods	Tariff rate	
			Week day (07:00 – 10:00) (Monday – Friday)	Peak	
			Week day (10:00 – 16:00) (Monday – Friday)	Off-peak	
			Week day (16:00 – 21:00) (Monday – Friday)	Peak	
			Week day (21:00 – 07:00) (Monday – Friday)	Off-peak	
			Weekend day (00:00 – 24:00) (Saturday – Sunday)	Off-peak	

Network Tariff class	Network Tariff	Description
Uncontrolled	Uncontrolled Low	This network tariff is for low voltage installations.
Energy	Voltage Heating (TAS41)	It is not available on a stand-alone basis and must be used in conjunction with the following network tariffs;
		Residential Low Voltage General (TAS31)
		Business Low Voltage General (TAS22)
		In installations that are located on premises that are used wholly or principally as Private Residential Dwellings, this network tariff is for water heating and/or residential space heating and/or domestic indoor pool heating only.
		In installations that are not located at Private Residential Dwellings, this network tariff is for water heating only.
Controlled Energy	Controlled Low	This network tariff is for low voltage installations.
	Voltage Energy – Off-Peak with afternoon boost	It is not available on a stand-alone basis and must be used in conjunction with one of the following network tariffs;
	(TAS61)	Residential Low Voltage General (TAS31)
		Business Low Voltage General (TAS22)
		In the case of installations that are Private Residential Dwellings and have a current connection on network tariff Residential Low Voltage General (TAS31), this network tariff may be used for:
		water heating and/or residential space heating and/or other    "wired in" appliances we approve; and/or
		heating swimming pools, including those that incorporate a spa, but not separate spas from which the water goes to waste after use.
		In installations that are not Private Residential Dwellings but which have a current connection on the Business Low Voltage General (TAS22) network tariff, the TAS61 network tariff may be used for:
		water heating and/or space heating and/or other "wired in" appliances we approve.
		This network tariff is a time of use tariff. For installations connected on this network tariff, energy will be available daily for:
		at least nine hours between 20:00 hours and 07:00 hours the following day; and
		a further two hours between 13:00 hours and 16:30 hours.
		TasNetworks will choose the actual times during the periods that the energy will be available.
		This network tariff is obsolete and no longer available to new customers.

Network Tariff class	Network Tariff	Description
Network Tariff class	Network Tariff  Controlled Low Voltage Energy — Night period only (TAS63)	This network tariff is available for low voltage installations only.  It is not available on a stand-alone basis and must be used in conjunction with the following network tariffs;  Residential Low Voltage General (TAS31)  Residential Low Voltage Time of Use (TAS93)  Residential Low Voltage PAYG Time of Use (TAS92)  Business Low Voltage General (TAS22)  Business Low Voltage Time of Use (TAS94)  In the case of installations that are Private Residential Dwellings, this network tariff may be used for:  water heating and/or residential space heating and/or other circuits we approve; and  heating swimming pools, including those that incorporate a spa, but not separate spas from which the water goes to waste after
		<ul> <li>but not separate spas from which the water goes to waste after use.</li> <li>In installations that are not Private Residential Dwellings, this network tariff:</li> <li>is for water heating and/or space heating and/or other circuits we approve.</li> <li>This network tariff is a time of use tariff. Energy to installations connected on this network tariff will only be available between 22:00 hours and 07:00 hours the following day.</li> </ul>
Unmetered	Unmetered Supply Low Voltage General (TASUMS)	This network tariff is intended to be applied to small, low voltage, low demand installations with a relatively constant load profile, such as:  illuminated street signs;  public telephone kiosks;  electric fences;  two-way radio transmitters;  fixed steady wattage installations;  traffic lights; or  level crossings.  For an installation to be supplied under this network tariff, the electrical devices being supplied must be permanently connected. For the avoidance of doubt, an installation containing a general purpose outlet does not qualify for this network tariff.

Network Tariff class	Network Tariff	Description
Streetlights	Unmetered Supply Low Voltage Public Lighting	This low voltage network tariff is for the provision of public lighting services and is available to councils, road authorities and other customers wishing to install contract lighting.
	(TASUMSSL)	The street lighting tariff rate is based on a "use of system charge" and charged on a per lamp wattage rate. This network tariff charge is an additional charge to charges we publish for the provision of public lighting services.
		This network tariff does not include charges for the installation and/or replacement of lamps. Costs for the installation and/or replacement of lamps are recovered through additional charges which are included in our public lighting services tariffs.
Individual Tariff Calculation (TASCUS)		Individual Tariff Calculation network tariffs will typically apply to customers with an electrical demand in excess of 2.0 MVA or where a customer's circumstances in a pricing zone identifies the average shared network charge to be meaningless or distorted. Individually calculated customer network charges are determined by modelling the connection point requirements as requested by the customer or their agents.
		Individual Tariff Calculation prices are based on actual transmission use of system charges for the relevant transmission connection point (preserving the pricing signals within the transmission charges), plus charges associated with the actual shared distribution network utilised for the electricity supply, along with connection charges based on the actual connection assets employed. This provides the greatest cost reflectivity for this type of customer and is feasible since the number of such customers is relatively small.
		Terms and conditions for these customers are contained within individually negotiated connection agreements.

## Appendix B: Indicative Prices for 2019 – 2024

Table B1: Indicative Prices (2019-20) Network Use of System (NUoS) – Standard Control Services

					NU	loS rates 20:	19-2020				
Tariff Class	Network tariff code	Tariff description	Service Charge	ToU C	onsumption c/kWh	Charge	Consumption Charge	Demand Charge c/kW/day	Demand Charge c/kVA/day		emand (Capacity) Charge ˈkVA/day
			c/day	Peak	Shoulder	Off-peak	c/kWh	(peak/off- peak)	(peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	335.188	1.334	0 801	0.200				19.311	193.129
	TAS15 <sup>7</sup>	Business High Voltage kVA Specified Demand (>2MVA)	2,751.500	0.967	0 581	0.145				9.408	47.043
Irrigation	TAS75	Irrigation Low Voltage Time of Use	244.823	10.424	6 253	1.563					
Large Low	TAS82	Business Low Voltage kVA Demand	331.981				2.469		34.267		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	467.668						45.779 / 15.243		
Small Low	TAS22	Business Low Voltage General	50.862				9.908				
Voltage	TAS94	Business Low Voltage Time of Use	66.902	10.669	6.401	1.600					
	TAS98	Business Low Voltage Distributed Energy Resources	73.994					59.638 / 9.929			
	TAS88	Low Voltage Commercial Time of Use Demand	73.994					59.638 / 9.929			
Residential	TAS31	Residential Low Voltage General	51.153				9.768				
	TAS92	Residential Low Voltage PAYG Time of Use	55.923	16.794		3.108					
	TAS101	Residential Low Voltage PAYG	51.571				8.021				
	TAS93	Residential Low Voltage Time of Use	55.923	16.794		3.108					
	TAS97	Residential Low Voltage Distributed Energy Resources	56.902					28.801 / 4.796			
	TAS87	Residential Time of Use Demand	56.902					28.801 / 4.796			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	6.321				5.807				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	12.044				1.736				
	TAS63	Controlled Low Voltage Energy – with Night period only	12.044				1.503				

<sup>&</sup>lt;sup>7</sup> DUoS component only, locational TUoS component also applies

					NU	JoS rates 20:	19-2020				
Tariff Class	Network tariff code	Tariff description	Service Charge	ToU Co	onsumption c/kWh	Charge	Consumption Charge	Demand Charge c/kW/day	Demand Charge c/kVA/day		emand (Capacity) Charge kVA/day
Unmetered			c/day	Peak	Shoulder	Off-peak	c/kWh	(peak/off- peak)	(peak/off- peak)	Specified	Excess
Unmetered	TASUMS	UMS Low Voltage General	50.862				11.774				
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.114			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B2: Indicative Prices (2019-20) Distribution Use of System (DUoS) – Standard Control Services

Tariff Class					DU	loS rates 20:	19-2020				
	TASSDM Business High Voltage kVA Special TAS158 Business High Voltage kVA Special TAS75 Irrigation Low Voltage Time of UN TAS82 Business Low Voltage Commercial TAS89 Large Low Voltage General TAS94 Business Low Voltage General TAS98 Business Low Voltage Time of UN TAS88 Low Voltage Time of UN TAS88 Low Voltage Time of UN TAS98 Business Low Voltage Distribute TAS88 Low Voltage Commercial Time of UN TAS91 Residential Low Voltage General TAS92 Residential Low Voltage PAYG TAS93 Residential Low Voltage Time of TAS93 Residential Low Voltage Time of TAS97 Residential Low Voltage Distribute TAS87 Residential Time of Use Demand TAS87 Residential Time of Use Demand TAS41 Uncontrolled Low Voltage Heating III Demand TAS41 Uncontrolled Low Voltage Heating II Dema		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	335.188	0.316	0.190	0.047				15 650	156.506
	TAS158	Business High Voltage kVA Specified Demand (>2MVA)	2,751.500	0.967	0 581	0.145				9.408	47.043
Irrigation	TAS75	Irrigation Low Voltage Time of Use	244.823	7.227	4 337	1.084					
Large Low	TAS82	Business Low Voltage kVA Demand	331.981				1.798		20.279		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	467.668						26.426 / 8.800		
Small Low	TAS22	Business Low Voltage General	50.862				7.568				
Voltage	TAS94	Business Low Voltage Time of Use	66.902	7.884	4.730	1.182					
	TAS98	Business Low Voltage Distributed Energy Resources	73.994					45.844 / 7.633			
	TAS88	Low Voltage Commercial Time of Use Demand	73.994					45.844 / 7.633			
Residential	TAS31	Residential Low Voltage General	51.153				7.428				
	TAS92	Residential Low Voltage PAYG Time of Use	55.923	12.374		2.290					
	TAS101	Residential Low Voltage PAYG	51.571				6.362				
	TAS93	Residential Low Voltage Time of Use	55.923	12.374		2.290					
	TAS97	Residential Low Voltage Distributed Energy Resources	56.902					22.676 / 3.776			
	TAS87	Residential Time of Use Demand	56.902					22.676 / 3.776			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	6.321				3.467				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	12.044				1.085				
	TAS63	Controlled Low Voltage Energy – with Night period only	12.044				0.982				
Unmetered	TASUMS	UMS Low Voltage General	50.862				8.503				

<sup>&</sup>lt;sup>8</sup> DUoS component only, locational TUoS component also applies

					DU	loS rates 201	.9-2020				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge :VA/day
Class	code	Tariff description	ription Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.086			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B3: Indicative Prices (2019-20) Transmission Use of System (TUoS) – Standard Control Services

Tariff Class					TU	loS rates 201	19-2020				
	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)		1.018	0 611	0.153				3 661	36.623
	TAS159	Business High Voltage kVA Specified Demand (>2MVA)									
Irrigation	TAS75	Irrigation Low Voltage Time of Use		3.197	1.916	0.479					
Large Low	TAS82	Business Low Voltage kVA Demand					0.671		13.988		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand							19.353 / 6.443		
Small Low	TAS22	Business Low Voltage General					2.340				
Voltage	TAS94	Business Low Voltage Time of Use		2.785	1 671	0.418					
	TAS98	Business Low Voltage Distributed Energy Resources						13.794 / 2.296			
	TAS88	Low Voltage Commercial Time of Use Demand						13.794 / 2.296			
Residential	TAS31	Residential Low Voltage General					2.340				
	TAS92	Residential Low Voltage PAYG Time of Use		4.420		0.818					
	TAS101	Residential Low Voltage PAYG					1.659				
	TAS93	Residential Low Voltage Time of Use		4.420		0.818					
	TAS97	Residential Low Voltage Distributed Energy Resources						6.125 / 1 020			
	TAS87	Residential Time of Use Demand						6.125 / 1 020			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	_				2.340				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost					0.651				
	TAS63	Controlled Low Voltage Energy – with Night period only					0.521				
Unmetered	TASUMS	UMS Low Voltage General					3.271				

<sup>&</sup>lt;sup>9</sup> DUoS component only, locational TUoS component also applies

					TU	loS rates 201	9-2020				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Street	code	Tariff description Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess	
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.028			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B4: Indicative Prices (2020-21) Network Use of System (NUoS) – Standard Control Services

					NU	loS rates 202	20-2021				
Tariff Class	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge «VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	350.271	1.352	0 811	0.203				20 083	200.834
	TAS1510	Business High Voltage kVA Specified Demand (>2MVA)	2,875.300	0.988	0 593	0.148				9 808	49.040
Irrigation	TAS75	Irrigation Low Voltage Time of Use	252.167	10.924	6 556	1.637					
Large Low	TAS82	Business Low Voltage kVA Demand	346.920				2.532		35.865		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	488.713						47 094 / 15.681		
Small Low	TAS22	Business Low Voltage General	52.388				10.195				
Voltage	TAS94	Business Low Voltage Time of Use	68.909	11.124	6 675	1.668					
	TAS98	Business Low Voltage Distributed Energy Resources	76.214					61.095 / 12.207			
	TAS88	Low Voltage Commercial Time of Use Demand	76.214					61.095 / 12.207			
Residential	TAS31	Residential Low Voltage General	52.687				9.953				
	TAS92	Residential Low Voltage PAYG Time of Use	57.601	17.124		3.255					
	TAS101	Residential Low Voltage PAYG	53.118				8.272				
	TAS93	Residential Low Voltage Time of Use	57.601	17.124		3.255					
	TAS97	Residential Low Voltage Distributed Energy Resources	58.609					29.592 / 5.913			
	TAS87	Residential Time of Use Demand	58.609					29.592 / 5.913			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	6.511				6.061				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	12.405				1.788				
	TAS63	Controlled Low Voltage Energy – with Night period only	12.405				1.546				
Unmetered	TASUMS	UMS Low Voltage General	52.388				12.132				

<sup>&</sup>lt;sup>10</sup> DUoS component only, locational TUoS component also applies

					NU	loS rates 202	0-2021				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge :VA/day
Class	code	Tariff description Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess	
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.119			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B5: Indicative Prices (2020-21) Distribution Use of System (DUoS) – Standard Control Services

Tariff Class					DU	loS rates 202	20-2021				
	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	350.271	0.323	0.193	0.048				16 302	163.013
	TAS15 <sup>11</sup>	Business High Voltage kVA Specified Demand (>2MVA)	2,875.300	0.988	0 593	0.148				9 808	49.040
Irrigation	TAS75	Irrigation Low Voltage Time of Use	252.167	7.661	4 597	1.149					
Large Low	TAS82	Business Low Voltage kVA Demand	346.920				1.849		21.297		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	488.713						27.368 / 9.113		
Small Low	TAS22	Business Low Voltage General	52.388				7.815				
Voltage	TAS94	Business Low Voltage Time of Use	68.909	8.287	4.972	1.243					
	TAS98	Business Low Voltage Distributed Energy Resources	76.214					47.045 / 9.400			
	TAS88	Low Voltage Commercial Time of Use Demand	76.214					47.045 / 9.400			
Residential	TAS31	Residential Low Voltage General	52.687				7.573				
	TAS92	Residential Low Voltage PAYG Time of Use	57.601	12.626		2.400					
	TAS101	Residential Low Voltage PAYG	53.118				6.579				
	TAS93	Residential Low Voltage Time of Use	57.601	12.626		2.400					
	TAS97	Residential Low Voltage Distributed Energy Resources	58.609					23.356 / 4.667			
	TAS87	Residential Time of Use Demand	58.609					23.356 / 4.667			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	6.511				3.681				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	12.405				1.123				
	TAS63	Controlled Low Voltage Energy – with Night period only	12.405				1.015				
Unmetered	TASUMS	UMS Low Voltage General	52.388				8.795				

<sup>&</sup>lt;sup>11</sup> DUoS component only, locational TUoS component also applies

					DU	JoS rates 202	20-2021				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess	
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.089			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B6: Indicative Prices (2020-21) Transmission Use of System (TUoS) – Standard Control Services

					TU	loS rates 202	20-2021				
Tariff	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)		1.029	0 618	0.155				3.781	37.821
	TAS1512	Business High Voltage kVA Specified Demand (>2MVA)									
Irrigation	TAS75	Irrigation Low Voltage Time of Use		3.263	1.959	0.488					
Large Low	TAS82	Business Low Voltage kVA Demand					0.683		14.568		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand							19.726 / 6.568		
Small Low	TAS22	Business Low Voltage General					2.380				
Voltage	TAS94	Business Low Voltage Time of Use		2.837	1.703	0.425					
	TAS98	Business Low Voltage Distributed Energy Resources						14.050 / 2.807			
	TAS88	Low Voltage Commercial Time of Use Demand						14.050 / 2.807			
Residential	TAS31	Residential Low Voltage General					2.380				
	TAS92	Residential Low Voltage PAYG Time of Use		4.498		0.855					
	TAS101	Residential Low Voltage PAYG					1.693				
	TAS93	Residential Low Voltage Time of Use		4.498		0.855					
	TAS97	Residential Low Voltage Distributed Energy Resources						6.236 / 1 246			
	TAS87	Residential Time of Use Demand						6.236 / 1 246			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating					2.380				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost					0.665				
	TAS63	Controlled Low Voltage Energy – with Night period only					0.531				
Unmetered	TASUMS	UMS Low Voltage General					3.337				

<sup>12</sup> DUoS component only, locational TUoS component also applies

					TU	loS rates 202	0-2021				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge :VA/day
Class	code	Tariff description Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess	
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.030			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B7: Indicative Prices (2021-22) Network Use of System (NUoS) – Standard Control Services

Tariff Class					NU	JoS rates 202	21-2022				
	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge :VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	366.034	1.370	0 822	0.204				20 886	208.877
	TAS15 <sup>13</sup>	Business High Voltage kVA Specified Demand (>2MVA)	3,004.700	1.010	0 605	0.151				10 232	51.159
Irrigation	TAS75	Irrigation Low Voltage Time of Use	259.732	11.454	6 875	1.718					
Large Low	TAS82	Business Low Voltage kVA Demand	362.531				2.596		37.528		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	510.705						48.471 / 16.141		
Small Low	TAS22	Business Low Voltage General	53.960				10.492				
Voltage	TAS94	Business Low Voltage Time of Use	70.976	11.595	6.958	1.739					
	TAS98	Business Low Voltage Distributed Energy Resources	78.500					62.611 / 14.595			
	TAS88	Low Voltage Commercial Time of Use Demand	78.500					62.611 / 14.595			
Residential	TAS31	Residential Low Voltage General	54.268				10.133				
	TAS92	Residential Low Voltage PAYG Time of Use	59.329	17.494		3.411					
	TAS101	Residential Low Voltage PAYG	54.712				8.544				
	TAS93	Residential Low Voltage Time of Use	59.329	17.494		3.411					
	TAS97	Residential Low Voltage Distributed Energy Resources	60.368					30.375 / 7.080			
	TAS87	Residential Time of Use Demand	60.368					30.375 / 7.080			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	6.706				6.333				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	12.777				1.842				
	TAS63	Controlled Low Voltage Energy – with Night period only	12.777				1.592				
Unmetered	TASUMS	UMS Low Voltage General	53.960				12.518				

<sup>&</sup>lt;sup>13</sup> DUoS component only, locational TUoS component also applies

					NU	loS rates 202	21-2022				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge :VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.124			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B8: Indicative Prices (2021-22) Distribution Use of System (DUoS) – Standard Control Services

Tariff Class High Voltage					DU	JoS rates 202	21-2022				
	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge :VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	366.034	0.331	0.198	0.049				16.997	169.988
	TAS1514	Business High Voltage kVA Specified Demand (>2MVA)	3,004.700	1.010	0 605	0.151				10 232	51.159
Irrigation	TAS75	Irrigation Low Voltage Time of Use	259.732	8.122	4 874	1.219					
Large Low	TAS82	Business Low Voltage kVA Demand	362.531				1.903		22.364		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	510.705						28.358 / 9.444		
Small Low	TAS22	Business Low Voltage General	53.960				8.068				
Voltage	TAS94	Business Low Voltage Time of Use	70.976	8.702	5 222	1.305					
	TAS98	Business Low Voltage Distributed Energy Resources	78.500					48.276 / 11.254			
	TAS88	Low Voltage Commercial Time of Use Demand	78.500					48.276 / 11.254			
Residential	TAS31	Residential Low Voltage General	54.268				7.709				
	TAS92	Residential Low Voltage PAYG Time of Use	59.329	12.909		2.518					
	TAS101	Residential Low Voltage PAYG	54.712				6.816				
	TAS93	Residential Low Voltage Time of Use	59.329	12.909		2.518					
	TAS97	Residential Low Voltage Distributed Energy Resources	60.368					24.016 / 5.598			
	TAS87	Residential Time of Use Demand	60.368					24.016 / 5.598			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	6.706				3.909				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	12.777				1.164				
	TAS63	Controlled Low Voltage Energy – with Night period only	12.777				1.051				
Unmetered	TASUMS	UMS Low Voltage General	53.960				9.114				

<sup>&</sup>lt;sup>14</sup> DUoS component only, locational TUoS component also applies

					DU	loS rates 202	1-2022				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.094			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B9: Indicative Prices (2021-22) Transmission Use of System (TUoS) – Standard Control Services

					TU	loS rates 202	21-2022				
Tariff	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)		1.039	0 624	0.155				3 889	38.889
	TAS15 <sup>15</sup>	Business High Voltage kVA Specified Demand (>2MVA)									
Irrigation	TAS75	Irrigation Low Voltage Time of Use		3.332	2 001	0.499					
Large Low	TAS82	Business Low Voltage kVA Demand					0.693		15.164		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand							20.113 / 6.697		
Small Low	TAS22	Business Low Voltage General					2.424				
Voltage	TAS94	Business Low Voltage Time of Use		2.893	1.736	0.434					
	TAS98	Business Low Voltage Distributed Energy Resources						14.335 / 3.341			
	TAS88	Low Voltage Commercial Time of Use Demand						14.335 / 3.341			
Residential	TAS31	Residential Low Voltage General					2.424				
	TAS92	Residential Low Voltage PAYG Time of Use		4.585		0.893					
	TAS101	Residential Low Voltage PAYG					1.728				
	TAS93	Residential Low Voltage Time of Use		4.585		0.893					
	TAS97	Residential Low Voltage Distributed Energy Resources						6.359 / 1.482			
	TAS87	Residential Time of Use Demand						6.359 / 1.482			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating					2.424				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost					0.678				
	TAS63	Controlled Low Voltage Energy – with Night period only	_				0.541				
Unmetered	TASUMS	UMS Low Voltage General					3.404				

<sup>&</sup>lt;sup>15</sup> DUoS component only, locational TUoS component also applies

					TU	loS rates 202	1-2022				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.030			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B10: Indicative Prices (2022-23) Network Use of System (NUoS) – Standard Control Services

					NU	JoS rates 202	22-2023				
Tariff Class	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	382.505	1.385	0 831	0.208				21.728	217.278
	TAS1516	Business High Voltage kVA Specified Demand (>2MVA)	3,139.900	1.020	0 612	0.153				10 522	52.613
Irrigation	TAS75	Irrigation Low Voltage Time of Use	267.524	12.011	7 208	1.802					
Large Low	TAS82	Business Low Voltage kVA Demand	378.845				2.664		39.335		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	533.687						49.914 / 16.622		
Small Low	TAS22	Business Low Voltage General	55.579				10.791				
Voltage	TAS94	Business Low Voltage Time of Use	73.105	12.086	7 251	1.814					
	TAS98	Business Low Voltage Distributed Energy Resources	80.855					64.206 / 17.104			
	TAS88	Low Voltage Commercial Time of Use Demand	80.855					64.206 / 17.104			
Residential	TAS31	Residential Low Voltage General	55.896				10.297				
	TAS92	Residential Low Voltage PAYG Time of Use	61.108	17.848		3.570					
	TAS101	Residential Low Voltage PAYG	56.353				8.809				
	TAS93	Residential Low Voltage Time of Use	61.108	17.848		3.570					
	TAS97	Residential Low Voltage Distributed Energy Resources	62.179					31.165 / 8.303			
	TAS87	Residential Time of Use Demand	62.179					31.165 / 8.303			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	6.907				6.618				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	13.161				1.897				
	TAS63	Controlled Low Voltage Energy – with Night period only	13.161				1.638				
Unmetered	TASUMS	UMS Low Voltage General	55.579				12.905				

<sup>&</sup>lt;sup>16</sup> DUoS component only, locational TUoS component also applies

					NU	JoS rates 202	22-2023				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge	c/l	nd (Capacity) Charge VA/day
Class	code code code code code code code code	c/kVA/day (peak/off- peak)	Specified	Excess							
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.129			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B11: Indicative Prices (2022-23) Distribution Use of System (DUoS) – Standard Control Services

Tariff Class High Voltage					DU	loS rates 202	22-2023				
	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	382.505	0.338	0 203	0.051				17.730	177.290
	TAS15 <sup>17</sup>	Business High Voltage kVA Specified Demand (>2MVA)	3,139.900	1.020	0 612	0.153				10 522	52.613
Irrigation	TAS75	Irrigation Low Voltage Time of Use	267.524	8.608	5.166	1.291					
Large Low	TAS82	Business Low Voltage kVA Demand	378.845				1.961		23.541		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	533.687						29.422 / 9.798		
Small Low	TAS22	Business Low Voltage General	55.579				8.323				
Voltage	TAS94	Business Low Voltage Time of Use	73.105	9.136	5.481	1.371					
	TAS98	Business Low Voltage Distributed Energy Resources	80.855					49.589 / 13.210			
	TAS88	Low Voltage Commercial Time of Use Demand	80.855					49.589 / 13.210			
Residential	TAS31	Residential Low Voltage General	55.896				7.829				
	TAS92	Residential Low Voltage PAYG Time of Use	61.108	13.177		2.636					
	TAS101	Residential Low Voltage PAYG	56.353				7.045				
	TAS93	Residential Low Voltage Time of Use	61.108	13.177		2.636					
	TAS97	Residential Low Voltage Distributed Energy Resources	62.179					24.683 / 6.576			
	TAS87	Residential Time of Use Demand	62.179					24.683 / 6.576			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	6.907				4.150				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	13.161				1.205				
	TAS63	Controlled Low Voltage Energy – with Night period only	13.161				1.086				
Unmetered	TASUMS	UMS Low Voltage General	55.579				9.430				

<sup>&</sup>lt;sup>17</sup> DUoS component only, locational TUoS component also applies

					DU	loS rates 202	2-2023				
Tariff	Network tariff		Service	ToU Co	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge :VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- Specified peak)	Excess	
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.098			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B12: Indicative Prices (2022-23) Transmission Use of System (TUoS) – Standard Control Services

Irrigation Large Low Voltage Small Low					TU	loS rates 202	22-2023				
	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)		1.047	0 628	0.157				3.998	39.988
	TAS1518	Business High Voltage kVA Specified Demand (>2MVA)									
Irrigation	TAS75	Irrigation Low Voltage Time of Use		3.403	2 042	0.511					
Large Low	TAS82	Business Low Voltage kVA Demand					0.703		15.794		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand							20.492 / 6.824		
Small Low	TAS22	Business Low Voltage General					2.468				
Voltage	TAS94	Business Low Voltage Time of Use		2.950	1.770	0.443					
	TAS98	Business Low Voltage Distributed Energy Resources						14.617 / 3.894			
	TAS88	Low Voltage Commercial Time of Use Demand						14.617 / 3.894			
Residential	TAS31	Residential Low Voltage General					2.468				
	TAS92	Residential Low Voltage PAYG Time of Use		4.671		0.934					
	TAS101	Residential Low Voltage PAYG					1.764				
	TAS93	Residential Low Voltage Time of Use		4.671		0.934					
	TAS97	Residential Low Voltage Distributed Energy Resources						6.482 / 1.727			
	TAS87	Residential Time of Use Demand						6.482 / 1.727			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating					2.468				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost					0.692				
	TAS63	Controlled Low Voltage Energy – with Night period only	_				0.552				
Unmetered	TASUMS	UMS Low Voltage General					3.475				

<sup>&</sup>lt;sup>18</sup> DUoS component only, locational TUoS component also applies

					TU	loS rates 202	2-2023				
Tariff	Network tariff		Service	ToU C	onsumption c/kWh	Charge	Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.031			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B13: Indicative Prices (2023-24) Network Use of System (NUoS) – Standard Control Services

					NU	loS rates 202	23-2024				
Tariff Class	Network tariff		Service	ToU Consumption Charge c/kWh			Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge :VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	399.718	1.405	0 843	0.211				22 645	226.439
	TAS1519	Business High Voltage kVA Specified Demand (>2MVA)	3,281.200	1.047	0 628	0.157				10.985	54.926
Irrigation	TAS75	Irrigation Low Voltage Time of Use	275.550	12.606	7 563	1.892					
Large Low	TAS82	Business Low Voltage kVA Demand	395.893				2.739		41.285		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	557.703						51.491 / 17.147		
Small Low	TAS22	Business Low Voltage General	57.246				11.094				
Voltage	TAS94	Business Low Voltage Time of Use	75.298	12.602	7 561	1.890					
	TAS98	Business Low Voltage Distributed Energy Resources	83.281					65.840 / 19.732			
	TAS88	Low Voltage Commercial Time of Use Demand	83.281					65.840 / 19.732			
Residential	TAS31	Residential Low Voltage General	57.573				10.444				
	TAS92	Residential Low Voltage PAYG Time of Use	62.942	18.198		3.731					
	TAS101	Residential Low Voltage PAYG	58.044				9.077				
	TAS93	Residential Low Voltage Time of Use	62.942	18.198		3.731					
	TAS97	Residential Low Voltage Distributed Energy Resources	64.044					31.949 / 9.575			
	TAS87	Residential Time of Use Demand	64.044					31.949 / 9.575			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	7.114				6.920				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	13.555				1.952				
	TAS63	Controlled Low Voltage Energy – with Night period only	13.555				1.685				
Unmetered	TASUMS	UMS Low Voltage General	57.246				13.296				

<sup>&</sup>lt;sup>19</sup> DUoS component only, locational TUoS component also applies

					NU	loS rates 202	23-2024				
Tariff	Network tariff		Service	ToU Consumption Charge c/kWh			Consumption	Demand Charge	Demand Charge	Specified Demand (Capacity) Charge c/kVA/day	
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.134			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B14: Indicative Prices (2023-24) Distribution Use of System (DUoS) – Standard Control Services

					DU	loS rates 202	23-2024				
Tariff Class	Network tariff		Service	ToU Consumption Charge c/kWh			Consumption	Demand Charge	Demand Charge	Specified Demand (Capacity) Char c/kVA/day	
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)	399.718	0.346	0 208	0.052				18 520	185.196
	TAS15 <sup>20</sup>	Business High Voltage kVA Specified Demand (>2MVA)	3,281.200	1.047	0 628	0.157				10.985	54.926
Irrigation	TAS75	Irrigation Low Voltage Time of Use	275.550	9.122	5.473	1.369					
Large Low	TAS82	Business Low Voltage kVA Demand	395.893				2.025		24.830		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand	557.703						30 595 / 10.188		
Small Low	TAS22	Business Low Voltage General	57.246				8.579				
Voltage	TAS94	Business Low Voltage Time of Use	75.298	9.594	5.757	1.439					
	TAS98	Business Low Voltage Distributed Energy Resources	83.281					50.945 / 15.268			
	TAS88	Low Voltage Commercial Time of Use Demand	83.281					50.945 / 15.268			
Residential	TAS31	Residential Low Voltage General	57.573				7.929				
	TAS92	Residential Low Voltage PAYG Time of Use	62.942	13.440		2.756					
	TAS101	Residential Low Voltage PAYG	58.044				7.274				
	TAS93	Residential Low Voltage Time of Use	62.942	13.440		2.756					
	TAS97	Residential Low Voltage Distributed Energy Resources	64.044					25.345 / 7.596			
	TAS87	Residential Time of Use Demand	64.044					25.345 / 7.596			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating	7.114				4.405				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost	13.555				1.246				
	TAS63	Controlled Low Voltage Energy – with Night period only	13.555				1.121				
Unmetered	TASUMS	UMS Low Voltage General	57.246				9.744				

<sup>&</sup>lt;sup>20</sup> DUoS component only, locational TUoS component also applies

					DU	loS rates 202	3-2024				
Tariff	Network tariff	Tariff description Charge	Service	ToU Consumption Charge c/kWh			Consumption	Demand Charge	Demand Charge	Specified Demand (Capacity) Charge c/kVA/day	
Class	code		Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.102			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B15: Indicative Prices (2023-24) Transmission Use of System (TUoS) – Standard Control Services

					TU	loS rates 202	23-2024				
Tariff	Network tariff		Service	ToU Consumption Charge c/kWh			Consumption	Demand Charge	Demand Charge		nd (Capacity) Charge VA/day
Class	code	Tariff description	Charge c/day	Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess
High Voltage	TASSDM	Business High Voltage kVA Specified Demand (<2MVA)		1.059	0 635	0.159				4.125	41.243
	TAS15 <sup>21</sup>	Business High Voltage kVA Specified Demand (>2MVA)									
Irrigation	TAS75	Irrigation Low Voltage Time of Use		3.484	2 090	0.523					
Large Low	TAS82	Business Low Voltage kVA Demand					0.714		16.455		
Voltage	TAS89	Large Low Voltage Commercial Time of Use Demand							20.896 / 6.959		
Small Low	TAS22	Business Low Voltage General					2.515				
Voltage	TAS94	Business Low Voltage Time of Use		3.008	1 804	0.451					
	TAS98	Business Low Voltage Distributed Energy Resources						14.895 / 4.464			
	TAS88	Low Voltage Commercial Time of Use Demand						14.895 / 4.464			
Residential	TAS31	Residential Low Voltage General					2.515				
	TAS92	Residential Low Voltage PAYG Time of Use		4.758		0.975					
	TAS101	Residential Low Voltage PAYG					1.803				
	TAS93	Residential Low Voltage Time of Use		4.758		0.975					
	TAS97	Residential Low Voltage Distributed Energy Resources						6.604 / 1.979			
	TAS87	Residential Time of Use Demand						6.604 / 1.979			
Uncontrolled	TAS41	Uncontrolled Low Voltage Heating					2.515				
Controlled Energy	TAS61	Controlled Low Voltage Energy – Off-Peak with afternoon boost					0.706				
	TAS63	Controlled Low Voltage Energy – with Night period only					0.564				
Unmetered	TASUMS	UMS Low Voltage General					3.552				

<sup>&</sup>lt;sup>21</sup> DUoS component only, locational TUoS component also applies

					TU	loS rates 202	3-2024				
Tariff	Network tariff	Service Tariff description Charge c/day	Service	ToU Consumption Charge c/kWh			Consumption	Demand Charge	Demand Charge	Specified Demand (Capacity) Charge c/kVA/day	
Class	code		Peak	Shoulder	Off-peak	Charge c/kWh	c/kW/day (peak/off- peak)	c/kVA/day (peak/off- peak)	Specified	Excess	
Street Lighting	TASUMSSL	UMS Low Voltage Public Lighting (lamp/watt/day)						0.0320.032			
Individual Tariff Calculation (ITC)	TASCUS1										

Table B16: Indicative Prices – Metering Services

	Capital					Non-Capital					
Tariff (\$ Nominal)	Indicative 2019-20 Price (c/day)	Indicative 2020-21 Price (c/day)	Indicative 2021-22 Price (c/day)	Indicative 2022-23 Price (c/day)	Indicative 2023-24 Price (c/day)	Indicative 2019-20 Price (c/day)	Indicative 2020-21 Price (c/day)	Indicative 2021-22 Price (c/day)	Indicative 2022-23 Price (c/day)	Indicative 2023-24 Price (c/day)	
Domestic LV – single phase	3.470	3.612	3.760	3.913	4.073	3.020	3.143	3.271	3.405	3.544	
Domestic LV – multi phase	7.202	7.496	7.802	8.121	8.452	6.266	6.522	6.788	7.066	7.354	
Domestic LV – CT meters	8.912	9.276	9.655	10.049	10.460	7.755	8.071	8.401	8.744	9.101	
Business LV – single phase	3.590	3.736	3.889	4.048	4.213	3.123	3.251	3.384	3.522	3.666	
Business LV – multi phase	7.181	7.474	7.780	8.097	8.428	6.248	6.503	6.769	7.045	7.333	
Business LV – CT meters	9.286	9.665	10.060	10.470	10.898	8.079	8.409	8.753	9.110	9.482	
Other meters	6.337	6.596	6.866	7.146	7.438	5.514	5.739	5.974	6.217	6.471	

Table B17: Indicative Prices – Public lighting services

Lighting type (\$ nominal)	Indicative 2019-20 Price (c/day)	Indicative 2020-21 Price (c/day)	Indicative 2021-22 Price (c/day)	Indicative 2022-23 Price (c/day)	Indicative 2023-24 Price (c/day)
NEW – Major	49.687	51.225	52.799	54.410	56.058
NEW – Minor	37.790	39.400	41.045	42.726	44.444
14W LED	37.790	39.400	41.045	42.726	44.444
18W LED	39.585	41.184	42.818	44.489	46.197
18W LED Decorative	52.624	54.145	55.701	57.294	58.925
25W LED	39.814	41.411	43.044	44.713	46.420
25W LED Decorative	52.853	54.373	55.928	57.519	59.149
42W Compact Fluorescent	41.410	42.998	44.621	46.281	47.978
42W Compact Fluorescent - Bottom Pole Entry	41.410	42.998	44.621	46.281	47.978
70W High Pressure Sodium	41.686	43.272	44.894	46.552	48.247
100W High Pressure Sodium	48.575	50.119	51.700	53.317	54.972
150W High Pressure Sodium	51.207	52.736	54.301	55.903	57.542
250W High Pressure Sodium	52.453	53.974	55.532	57.126	58.758
400W High Pressure Sodium	53.044	54.562	56.116	57.707	59.335
250W High Pressure Sodium - Flood Light	56.158	57.657	59.192	60.765	62.375
400W High Pressure Sodium - Flood Light	55.488	56.992	58.531	60.107	61.721
100W Metal Halide	48.979	50.522	52.100	53.715	55.367
150W Metal Halide	51.394	52.922	54.486	56.086	57.725
250W Metal Halide	52.335	53.858	55.416	57.011	58.643
400W Metal Halide	57.050	58.544	60.074	61.641	63.246
250W Metal Halide - Flood Light	57.346	58.838	60.366	61.931	63.534

Lighting type (\$ nominal)	Indicative 2019-20 Price (c/day)	Indicative 2020-21 Price (c/day)	Indicative 2021-22 Price (c/day)	Indicative 2022-23 Price (c/day)	Indicative 2023-24 Price (c/day)
400W Metal Halide - Flood Light	57.050	58.544	60.074	61.641	63.246
T5 Fluorescent 2 x 24W (obsolete)	43.615	45.190	46.800	48.447	50.131
1 x 20W Fluorescent (obsolete)	43.329	44.905	46.517	48.165	49.851
50W Mercury Vapour (obsolete)	39.179	40.781	42.418	44.091	45.801
80W Mercury Vapour (obsolete)	39.167	40.768	42.405	44.078	45.789
80W Mercury Vapour Decorative (obsolete)	55.506	57.009	58.548	60.124	61.738
125W Mercury Vapour (obsolete)	48.638	50.182	51.763	53.379	55.034
250W Mercury Vapour (obsolete)	49.077	50.619	52.196	53.811	55.462
400W Mercury Vapour (obsolete)	50.616	52.148	53.717	55.322	56.965

Table B18: Indicative Prices – Contract lighting services

Lighting type (\$ nominal)	Indicative 2019-20 Price (c/day)	Indicative 2020-21 Price (c/day)	Indicative 2021-22 Price (c/day)	Indicative 2022-23 Price (c/day)	Indicative 2023-24 Price (c/day)
New – Major	14.487	15.082	15.690	16.312	16.948
New – Minor	13.721	14.321	14.933	15.560	16.200
14W LED	13.721	14.321	14.933	15.560	16.200
18W LED	13.510	14.111	14.725	15.353	15.994
18W LED Decorative	13.510	14.111	14.725	15.353	15.994
25W LED	13.510	14.111	14.725	15.353	15.994
25W LED Decorative	13.510	14.111	14.725	15.353	15.994
42W Compact Fluorescent	19.168	19.735	20.316	20.910	21.517
42W Compact Fluorescent - Bottom Pole Entry	19.168	19.735	20.316	20.910	21.517
50W Mercury Vapour (obsolete)	18.995	19.563	20.144	20.739	21.348
80W Mercury Vapour (obsolete)	18.954	19.523	20.104	20.700	21.309
80W Mercury Vapour Decorative (obsolete)	18.954	19.523	20.104	20.700	21.309
125W Mercury Vapour (obsolete)	22.388	22.936	23.497	24.072	24.661
250W Mercury Vapour (obsolete)	22.388	22.936	23.497	24.072	24.661
400W Mercury Vapour (obsolete)	22.537	23.084	23.644	24.218	24.806
70W High Pressure Sodium	19.442	20.007	20.586	21.179	21.785
100W High Pressure Sodium	23.352	23.894	24.450	25.019	25.602
150W High Pressure Sodium	23.613	24.153	24.707	25.275	25.856
250W High Pressure Sodium	23.784	24.323	24.876	25.443	26.024
400W High Pressure Sodium	23.843	24.382	24.935	25.501	26.081
250W High Pressure Sodium - Flood Light	23.784	24.323	24.876	25.443	26.024

Lighting type (\$ nominal)	Indicative 2019-20 Price (c/day)	Indicative 2020-21 Price (c/day)	Indicative 2021-22 Price (c/day)	Indicative 2022-23 Price (c/day)	Indicative 2023-24 Price (c/day)
400W High Pressure Sodium - Flood Light	23.843	24.382	24.935	25.501	26.081
100W Metal Halide	23.614	24.154	24.708	25.276	25.857
150W Metal Halide	23.408	23.950	24.505	25.074	25.657
250W Metal Halide	23.408	23.950	24.505	25.074	25.657
400W Metal Halide	24.089	24.627	25.178	25.742	26.321
250W Metal Halide - Flood Light	23.408	23.950	24.505	25.074	25.657
400W Metal Halide - Flood Light	24.089	24.627	25.178	25.742	26.321
1 x 20W Fluorescent (obsolete)	19.037	19.605	20.186	20.781	21.390
2 x 20W Fluorescent (obsolete)	19.324	19.890	20.469	21.062	21.669
1 x 40W Fluorescent (obsolete)	19.056	19.624	20.205	20.799	21.408
2 x 40W Fluorescent (obsolete)	19.361	19.927	20.506	21.099	21.706
3 x 40W Fluorescent (obsolete)	23.148	23.691	24.248	24.818	25.403
4 x 40W Fluorescent (obsolete)	23.452	23.993	24.548	25.117	25.699
4 x 20W Fluorescent (obsolete)	19.897	20.459	21.035	21.625	22.229
60W Incandescent (obsolete)	18.873	19.442	20.024	20.620	21.230
100W Incandescent(obsolete)	22.356	22.904	23.465	24.040	24.630

Table B19: Indicative Prices - Fee-based services

Service (\$ nominal, GST exclusive)	Indicative 2019-20 Price (\$)	Indicative 2020-21 Price (\$)	Indicative 2021-22 Price (\$)	Indicative 2022-23 Price (\$)	Indicative 2023-24 Price (\$)
Energisation, de-energisation, re-energisation and special rea	ds				
Site visit – no appointment – de-energisation, re-energisation	81.37	83.36	85.40	87.49	89.63
Site visit – no appointment – special reads	52.59	53.88	55.20	56.55	57.94
Site visit – non-scheduled visit	134.40	137.69	141.06	144.52	148.06
Site visit – same day premium service	207.21	212.29	217.49	222.82	228.28
Site visit – after hours	291.11	298.24	305.55	313.04	320.71
Site visit – credit action or site issues	141.13	144.59	148.13	151.76	155.48
Site visit – credit action pillar box/pole top	246.64	252.68	258.87	265.21	271.71
Site visit – current transformer (CT) metering	126.74	129.85	133.03	136.29	139.63
Site visit – pillar box/pole top	246.64	252.68	258.87	265.21	271.71
Site visit – pillar box/pole top wasted visit	141.13	144.59	148.13	151.76	155.48
Transfer of retailer	-	-	-	-	-
Meter test					
Meter test – single phase	259.72	266.08	272.60	279.28	286.12
Meter test – multi phase	512.62	525.18	538.05	551.23	564.74
Meter test – current transformer (CT)	568.81	582.75	597.03	611.66	626.65
Meter test – after hours	878.56	900.08	922.13	944.72	967.87
Meter test – wasted visit	91.13	93.36	95.65	97.99	100.39
Supply abolishment					
Remove service and meters	250.74	256.88	263.17	269.62	276.23
Supply abolishment – after hours	567.39	581.29	595.53	610.12	625.07

Service (\$ nominal, GST exclusive)	Indicative 2019-20 Price (\$)	Indicative 2020-21 Price (\$)	Indicative 2021-22 Price (\$)	Indicative 2022-23 Price (\$)	Indicative 2023-24 Price (\$)
Supply abolishment – wasted visit	154.82	158.61	162.50	166.48	170.56
Tee-up					
Tee-up/Appointment	148.70	152.34	156.07	159.89	163.81
Tee-up/Appointment – after hours	663.72	679.98	696.64	713.71	731.20
Tee-up/Appointment – no truck – after hours	340.53	348.87	357.42	366.18	375.15
Tee-up/Appointment – wasted visit	92.50	94.77	97.09	99.47	101.91
Miscellaneous services					
Open turret	133.28	136.55	139.90	143.33	146.84
Data download	287.82	294.87	302.09	309.49	317.07
Alteration to unmetered supply	217.58	222.91	228.37	233.97	239.70
Meter relocation	189.48	194.12	198.88	203.75	208.74
Tiger tails – standard/multiphase	741.94	760.12	778.74	797.82	817.37
Tiger tails – scaffolding single phase	1,183.00	1,211.98	1,241.67	1,272.09	1,303.26
Tiger tails – scaffolding multi phase	1,295.40	1,327.14	1,359.65	1,392.96	1,427.09
Miscellaneous service	119.23	122.15	125.14	128.21	131.35
Miscellaneous service – after hours	519.45	532.18	545.22	558.58	572.27
Miscellaneous service – wasted visit	91.13	93.36	95.65	97.99	100.39
Administration	52.13	53.41	54.72	56.06	57.43
Statutory right – access prevented	1,301.00	1,332.87	1,365.53	1,398.99	1,433.27
Tariff change	52.13	53.41	54.72	56.06	57.43
Emergency maintenance contestable meters	57.41	58.82	60.26	61.74	63.25
Emergency maintenance contestable meters – after hours	339.90	348.23	356.76	365.50	374.45

Service (\$ nominal, GST exclusive)	Indicative 2019-20 Price (\$)	Indicative 2020-21 Price (\$)	Indicative 2021-22 Price (\$)	Indicative 2022-23 Price (\$)	Indicative 2023-24 Price (\$)
Meter recovery and disposal	105.18	107.76	110.40	113.10	115.87
Connection Establishment charges	tion Establishment charges				
Creation of a NMI	42.53	43.57	44.64	45.73	46.85
Overhead service, single span - single phase	677.91	694.52	711.54	728.97	746.83
Overhead service, single span - multi phase	997.41	1,021.85	1,046.89	1,072.54	1,098.82
Underground service in turret/cabinet - single phase	188.23	192.84	197.56	202.40	207.36
Underground service in turret/cabinet - multi phase	248.20	254.28	260.51	266.89	273.43
Underground service with pole mounted fuse - single phase	480.30	492.07	504.13	516.48	529.13
Underground service with pole mounted fuse - multi phase	618.61	633.77	649.30	665.21	681.51
Basic connection – after hours	1,051.34	1,077.10	1,103.49	1,130.53	1,158.23
Connection establishment - wasted visit	158.26	162.14	166.11	170.18	174.35
Temporary disconnection charges	Temporary disconnection charges				
Disconnect/reconnect overhead service for facia repairs - single phase	465.98	477.40	489.10	501.08	513.36
Disconnect/reconnect overhead service for facia repairs - multi phase	578.38	592.55	607.07	621.94	637.18
Temporary disconnect/reconnect – retailer requested outage	409.79	419.83	430.12	440.66	451.46
Temporary disconnect/reconnect – after hours	882.93	904.56	926.72	949.42	972.68
Temporary disconnect/reconnect – wasted visit	185.00	189.53	194.17	198.93	203.80
asic connection alteration					
Connection alteration – overhead single phase	354.96	363.66	372.57	381.70	391.05
Connection alteration – overhead multi phase	467.35	478.80	490.53	502.55	514.86

Service (\$ nominal, GST exclusive)	Indicative 2019-20 Price (\$)	Indicative 2020-21 Price (\$)	Indicative 2021-22 Price (\$)	Indicative 2022-23 Price (\$)	Indicative 2023-24 Price (\$)
Connection of new consumer mains to an existing installation — underground single phase to turret	214.46	219.71	225.09	230.60	236.25
Connection of new consumer mains to an existing installation – underground single phase to pole	411.15	421.22	431.54	442.11	452.94
Connection of new consumer mains to an existing installation – underground multi phase to turret	270.66	277.29	284.08	291.04	298.17
Connection of new consumer mains to an existing installation – underground multi phase to pole	523.55	536.38	549.52	562.98	576.77
Augment single phase overhead service to multi phase supply	1,081.71	1,108.21	1,135.36	1,163.18	1,191.68
Augment multi phase overhead service to single phase supply	762.20	780.87	800.00	819.60	839.68
Augment single phase overhead service to underground supply (turret)	441.12	451.93	463.00	474.34	485.96
Augment multi phase overhead service to underground supply (turret)	553.52	567.08	580.97	595.20	609.78
Augment single phase overhead service to underground supply (pole)	564.60	578.43	592.60	607.12	621.99
Augment multi phase overhead service to underground supply (pole)	702.91	720.13	737.77	755.85	774.37
Basic connection alteration – after hours	1,134.93	1,162.74	1,191.23	1,220.42	1,250.32
Basic connection wasted visit	172.31	176.53	180.85	185.28	189.82

Table B20: Proposed Tariffs for Quoted Services

Labour (\$ nominal)	2019-20 Price (\$/hour)	2020-21 Price (\$/hour)	2021-22 Price (\$/hour)	2022-23 Price (\$/hour)	2023-24 Price (\$/hour)
Asset Inspector	87.93	90.09	92.30	94.56	96.87
Asset Inspector – Including vehicle	107.93	110.58	113.29	116.06	118.91
Cable jointer	112.70	115.72	118.83	122.02	125.30
Customer connections – commercial metering	135.17	138.48	141.87	145.35	148.91
Customer connections – service crew	122.19	125.19	128.26	131.40	134.62
Designer	120.73	123.69	126.72	129.82	133.00
Distribution electrical technician	101.87	104.36	106.92	109.54	112.22
Distribution electrical technician – Including vehicle	121.87	124.85	127.91	131.05	134.26
Distribution linesman	110.43	113.14	115.91	118.75	121.66
Distribution linesman – live line	122.40	125.40	128.47	131.62	134.85
Distribution operator	114.72	117.53	120.41	123.36	126.38
Distribution operator – Including vehicle	134.72	138.02	141.40	144.87	148.42
Engineer	130.29	133.48	136.75	140.11	143.54
Senior engineer	149.98	153.65	157.42	161.28	165.23
Field service co-ordinator	109.87	112.56	115.32	118.14	121.04
General Administration	111.33	114.05	116.85	119.71	122.64
Labourer – overhead	99.87	102.32	104.83	107.39	110.03
Meter reader	94.05	96.35	98.71	101.13	103.61
Project manager	135.66	138.98	142.38	145.87	149.45

## **Appendix C: Designing cost reflective tariffs**

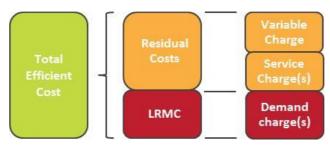
Our network tariffs are set each year so as to achieve our pricing objectives like cost reflectivity, whilst taking into account forecasts of customer numbers, consumption and demand relating to each network tariff.

## **C.1** Targeting cost reflective tariffs

We determine the target network tariff parameters by:

- estimating the total efficient cost (\$) for each tariff;
- estimating the long run marginal cost (\$/kVA or \$/kW) for each tariff,
- determining the required long run marginal cost revenues (\$) for each tariff;
- calculating the residual costs (\$), this being the difference between the total efficient cost and long run marginal cost revenues for each tariff; and
- allocating the residual costs in a manner which seeks to minimise distortions to the long run marginal cost signals. Residual costs are allocated between the service charge (\$) and variable charge/s (\$). Allocation is dependent on the characteristics of the tariff. In terms of the demand based time of use tariffs, most of the residual costs are recovered via the service charge and the off-peak demand charges.

The following diagram illustrates the relationship between TEC, LRMC and Residual Costs for each network tariff and the general basis on which they are allocated against the different components that make up our tariffs.



Note: For tariffs without a demand based charge, the residual cost is equal to the TEC for that tariff.

Our tariffs are designed to meet full cost reflectivity and the Rules' requirement that tariffs be based on long run marginal cost and the recovery of our total efficient costs. Getting there involves a different approach for legacy tariffs compared to new tariffs:

• Legacy tariffs | Not all of our tariffs currently meet these target parameters and are being transitioned to full cost reflectivity over time in order to avoid price shocks for our customers. Each year we aim to incrementally transition our legacy tariffs closer to the target tariff parameters.

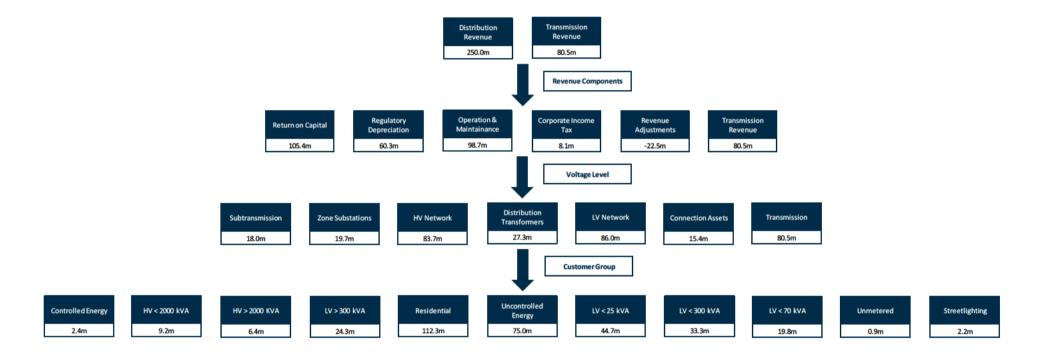
• New tariffs | Any new tariffs introduced since the commencement of the National Electricity Rules requirements have been designed to immediately reflect the target network tariff parameters. Overall, to encourage customer uptake of our more cost reflective tariffs, these new tariffs recover relatively smaller shares of our residual costs than our less efficient legacy tariffs. This is a transitional approach that will be reviewed as the cost reflective tariffs become the dominant means of revenue recovery for us.

The checks and balances that we apply in our tariff setting process include:

- That overall forecast revenue, when summed across the network tariff classes, is no more than the revenue allowance approved by the AER after allowing for any under-or over-recoveries in prior years, adjustments for actual inflation and pass-throughs, such as the electrical safety levy;
- We have considered and managed annual bill impacts on our customers, and ensured the annual percentage changes in the tariffs classes are within the side constraints approved by the AER;
- The revenue for each tariff class lies between the stand alone and avoidable costs for that tariff class;
- The revenue for each tariff is at, or moving towards, recovery of the total efficient cost for that tariff; and
- Where applicable, the peak demand component of the tariff is set at a level to recover the long run marginal cost for that tariff.

This process is demonstrated in the figure below (Figure 2), which shows the anticipated revenue flows and customer recovery for the 2019-20 year.

Figure 2 2019-20 Revenue allocation from total revenue to customer group



## C.2 Calculating what cost reflectivity looks like

### Demand charges by reference to LRMC

We determine the costs to be recovered from a tariff class, and design the charging parameters within a tariff, in order to reflect the long term costs while providing effective price signals to our customers. Our network tariffs and charging parameters are designed to recover amounts from network tariff classes which are reflective of the costs of providing services to these customers. Our network tariffs will also send pricing signals to customers about the cost of their use of the network through the selection of appropriate charging parameters.

We design our network tariffs to contain a combination of charging parameters in order to reflect long run marginal cost and recover the total allowable revenue. Network tariffs may include:

- a specified demand charge that may take into account the long term demand peak and provide effective pricing signals to customers of excessive load at peak time;
- an anytime demand charge that is used to take into account short term peaks in demand; or
- time of use demand charges to take into account the long term demand peak.

In all cases, the demand charge component of the network tariff is based on the long run marginal cost. We address the requirement for network tariffs to reflect the additional cost of meeting demand at times of greatest utilisation of the network by basing our estimate of the long run marginal cost on the forecast augmentation and relevant replacement capital expenditure. This expenditure represents the investment in capacity required to meet the peak demand (and in updating our LRMC estimates we include a proportion of asset Replacement Expenditure (Repex)).

To the extent feasible, we have set the demand component of our network charges at, or approaching, the long run marginal cost for the relevant tariff class. In the development of our LRMC estimates we do not develop separate investment and growth streams for each tariff class directly, rather we disaggregate data to enable LRMC to be determined at the tariff level.

The cost components of the estimates have been developed utilising the ten-year Program of Work forecasts, including those projects that are related to augmentation of the network as well as a proportion of forecast Repex (and associated incremental opex).

We then allocate those costs to tariff classes, and then to individual tariffs, using an allocation methodology (a reasonable cost allocation methodology) to.

Our derived LRMC values do not take into account tariff diversity factors. We account for diversity when developing the price of any demand based tariff component. The following process is followed to calculate a price for the tariff charge parameter by which the LRMC is signalled:

- 1. determine the LRMC at a tariff level
- 2. calculate the contribution of that tariff towards network peak demand
- determine the total amount to be recovered from the tariff with respect to the LRMC signal, which is the LRMC value multiplied by contribution of the tariff to system peak (taking into account diversity across tariffs)

4. divide the revenue in the previous step by the forecast quantity of the tariff charge parameter (accounting for diversity within the tariff) to determine price.

Diversity is accounted for as part of the tariff development process. Where a tariff has a high level of diversity associated with it (for example residential), forecast demand to be billed will be higher and the overall price will be reduced relative to the LRMC signal by a greater amount than for a tariff with an associated lower level of diversity. We currently have limited data on which to base our diversity factors, therefore we may be underestimating the level of residential diversity. We will analyse this further in light of the data provided from the emPOWERing You Trial.

### Our current estimates of long run marginal cost

As noted above, it is a requirement that each of our tariffs be based on the long run marginal cost of providing our service. Long run marginal cost provides a measure of how our operating and capital expenditure will change (in the long run) in response to incremental changes in demand. Setting network tariffs based on long run marginal cost will provide our customers with a cost reflective signal that encourages efficient electricity usage.

We base our long run marginal cost on the average incremental cost method. This approach utilises information that is currently available for the revenue determination and planning processes (the same program of work underpins our calculations as discussed in our regulatory proposal). The approach is also consistent with the approach adopted by other distribution networks and approved by the AER, as it is generally considered to be well suited to situations where there is a consistent profile of investment over time to service growth in demand.

The long run marginal cost for each network tariff class has been calculated using a forward looking, average incremental cost approach, using the following formula:

$$LRMC = \frac{Present\ Value\ (new\ network\ capacity\ +\ marginal\ operating\ costs)}{Present\ Value\ (additional\ demand\ served)}$$

#### Where:

- New network capacity is the forecast capital expenditure that we categorise as capital
  expenditure related to demand driven augmentation and replacements.
- Marginal operating costs is the additional operating expenditure attributable to the incremental capital expenditure.
- Additional demand served is the forecast incremental demand that can be served as a result of the above capital expenditure.
- The present value has been determined for ten year forecasts for the incremental capital
  expenditure, operating expenditure and demand, using the regulated weighted average cost of
  capital as the discount rate.

The table below sets out the estimated long run marginal cost for each network tariff as at 2019-20. We estimate this will increase by inflation in each year over the TSS period.

# Estimated long run marginal cost

Tariff class	Network tariff	Long run marginal cost (\$/kW)
		2019-20
High Voltage	Business High Voltage kVA Specified Demand (TASSDM)	\$89
High voltage	Business High Voltage kVA Specified Demand >2MVA (TAS15)	\$104
Individual Tariff Calculation	Individual Tariff Calculation (TASCUS)	\$104
Irrigation	Irrigation Low Voltage Time of Use (TAS75)	\$111
Larra Law Valtara	Business Low Voltage kVA Demand (TAS82)	\$80
Large Low Voltage	Large Low Voltage Commercial Time of Use Demand (TAS89)	\$80
	Low Voltage Commercial Time of Use Demand (TAS88)	\$107
Small Low Voltage	Business Low Voltage Distributed Energy Resources	\$107
	Business Low Voltage General (TAS22)	\$134
	Business Low Voltage Time of Use (TAS94)	\$107
	Residential Time of Use Demand Tariff (TAS87)	\$140
	Residential Low Voltage Distributed Energy Resources	\$140
Residential	Residential Low Voltage General (TAS31)	\$140
	Residential Low Voltage PAYG (TAS101)	\$140
	Residential Low Voltage PAYG Time of Use (TAS92)	\$140
	Residential Low Voltage Time of Use (TAS93)	\$140
Uncontrolled Energy	Uncontrolled Low Voltage Heating (TAS41)	\$97
Controlled F	Controlled Low Voltage Energy – Off-peak with afternoon boost (TAS61)	\$105
Controlled Energy	Controlled Low Voltage Energy – Night period only (TAS63)	\$105
Unmetered	Unmetered Supply Low Voltage General (TASUMS)	\$137
Street Lighting	Unmetered Supply Low Voltage Public Lighting (TASUMSSL)	\$137

## C.3 Designing our new tariffs

#### **DER tariff design**

We have designed our DER tariffs to meet the following objectives:

- Allow DER customers to benefit from their investment
- Ensure DER customers help lower rather than increase network costs in future, supporting lower bills for all customers
- The tariff is simple and capable of being understood by DER investors who we seek to encourage to opt-in to the tariff
- The tariffs are compliant with the Rules.

We tested these design principles with our PRWG in April 2017, as well as the proposal to offer the new DER tariffs on an opt-in rather than opt-out basis, which was driven by feedback from customers.

To achieve these objectives, we propose our DER tariff be based on the equivalent new time of use demand tariff introduced during the 2017-19 TSS, and modified to ensure that the average DER customer will benefit from choosing this tariff. This approach means a discount in terms of residual revenue recovery is applied to ensure that, on average, customers will realise a decrease in network charges relative to our equivalent default tariff for that tariff class. The figure below illustrates this design.

Figure 3 Demand tariff components and DER tariff design



Long run marginal cost demand charge | We have set the peak demand charge to reflect the same LRMC estimates of \$140 and \$107 per KW that we used in setting our time of use demand tariffs.

Residual costs | We propose to implement our discounting incentive through the off-peak charge and kept the service charge the same as the equivalent time of use demand tariffs. Compared to the option of discounting the service charge, we consider the off-peak demand discounting sends a better signal for customers to manage how they use our network and save network costs through load shifting into the off-peak period. We discussed various options for the level of discounting, the length of time this temporary discounting applies for and the funding of the discount with our PRWG, as explained in Appendix D.

Customer impacts | Using the average load profile of a customer from our emPOWERing You Trial with photovoltaic solar panels, we modelled indicative charge impacts for these customers compared to our default tariff for their tariff class. This analysis shows that these customers can potentially save \$105 per annum by choosing these tariffs that facilitate effective use of DER technology to manage demand.



Tasmanian Networks Pty Ltd ABN 24 167 357 299 PO Box 606 Moonah TAS 7009