

TasNetworks Annual Pricing Proposal 2022-23

As approved by the Australian Energy Regulator

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This Annual Pricing Proposal has been prepared by TasNetworks following the requirements of the National Electricity Rules, to provide details of TasNetworks proposed 2022-23 Standard Control and Alternative Control Services. Comprehensive information on the network tariffs for each type and size of customer has been included in this proposal.



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TasNetworks acknowledges the palawa (Tasmanian Aboriginal community) as the original owners and custodians of lutruwita (Tasmania). TasNetworks, acknowledges the palawa have maintained their spiritual and cultural connection to the land and water. We pay respect to Elders past and present and all Aboriginal and Torres Strait Islander peoples here with us today.

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1 Glossary

Term or Abbreviation	Description
ACS	Alternative control services
AER	Australian Energy Regulator
Augmentation	Investment in new network assets to meet increased demand
Capacity	The amount of electrical power that a part of the network is able to carry
Controlled load	The DNSP controls the hours in which the supply of electricity is made available
Cost reflective pricing	Pricing which is indicative of the true cost of supplying or providing a service
Demand	Electricity consumption at a point in time
Demand Management	The ability for DNSPs to constrain customers demand at critical times and attempt to modify customer behaviour.
DER	Distributed energy resources, e.g. solar PVs, batteries, 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 to operate lighting, heating, appliances and industrial equipment.
DNSP	Distribution network service provided e.g. TasNetworks
DPPC	Designated Pricing Proposal Costs also referred to in this document as Transmission Use of System (TUoS)
DUoS	Distribution Use of System. The utilisation of the distribution network in the provision of electricity to distribution customers.
HV	High voltage.
ITC	Individual tariff calculations
kV, kVA	Kilovolt, Kilovolt ampere
kW, kWh	Kilowatt, Kilowatt hour
LRMC	Long run marginal cost. The additional cost of providing one increment in service over the long run
LV	Low voltage.
NEL	National Electricity Law
NEM	National Electricity Market
NER, the Rules	National Electricity Rules
Network tariff	Network price parameters and conditions of supply for a network tariff class
Network tariff class	A class of retail customers for one or more direct control services who are subject to a particular network tariff or class of network tariffs with similar electricity demand and usage.
NUoS	Network Use of System. Reflects the combination of NUoS and TUoS as the utilisation of the total electricity network in the provision of electricity to consumers.
MVA	Megavolt-ampere
PV	Photo Voltaic. Solar PV panels
Price signal	Information conveyed to end users of electricity via the prices charged for a network service, which provides a signal about the true cost of providing a service and/or the value

Term or Abbreviation	Description
	to the customer of that service, which influences their decisions about the use of the service.
Retailer	A business that buys electricity from generators, packages it with the network services (for transportation of the electricity) and sells it to consumers/end users.
SCS	Standard control service
TAR	Total allowable revenue
TEC	Total efficient cost
TNSP	Transmission Network Service Provider
ToU	Time of use
Transmission network	The assets and services that enable large generators, e.g. windfarms, 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 2019-24.
TUoS	Transmission Use of System. Charges for the utilisation of the transmission network also referred to as DPPC.
Unmetered supply	A connection to the distribution system which is not equipped with a meter and for which the consumption of electricity is estimated, e.g. public lights, traffic lights, phone boxes are not normally metered.

2 Introduction

2.1 Annual Pricing Proposal

The National Electricity Rules (**NER**) requires that, at least three months prior to the beginning of each regulatory year, TasNetworks, as the operator of an electricity distribution network within the National Electricity Market (**NEM**), must submit an Annual Pricing Proposal for the Australian Energy Regulator's (**AER**) approval¹.

The purpose of the Annual Pricing Proposal is to set out the network tariffs which TasNetworks is proposing to apply in the coming regulatory year (2022-23) for standard control services (**SCS**), as well as the prices it proposes to charge for a range of alternative control services (**ACS**).

The Annual Pricing Proposal is designed to explain the prices TasNetworks proposes to apply in 2022-23, the derivation of those prices, compliance with the NER, the National Electricity Law (**NEL**) and the AER's Distribution Determination for TasNetworks.

Our network tariffs have been developed in accordance with the NER², and the methodologies described in our 2019-24 Tariff Structure Statement (**TSS**) and are designed to efficiently recover the regulated costs of providing distribution services from our customers. The classification of the services, network tariff classes and network tariff structures reflected in this Annual Pricing Proposal reflect those detailed in the TSS as approved by the AER in April 2019³.

2.2 Goods and services tax (GST)

The network tariffs outlined in this pricing proposal, unless otherwise stated, are exclusive of GST.

2.3 Supporting documents

TasNetworks has published a range of documents which are intended to assist external parties understand the development and application of network tariffs and of prices for alternative control services set out in this document. This Annual Pricing Proposal is supported by the following documents:⁴

- Standard control services network tariff approval model 2022-23
- Network tariff application and price guide 2022-23
- Indicative pricing schedule for network tariffs 2022-23 to 2023-24
- Alternative control pricing model 2022-23
- Metering application and price guide 2022-23
- Public lighting services application and price guide 2022-23
- Ancillary services – Fee based services application and price guide 2022-23
- Ancillary services – Quoted services application and price guide 2022-23

These documents should be read in conjunction with this Annual Pricing Proposal.

¹ NER, Clause 6.18.2(a)(2)

² NER, Clauses 6.18.2(b)(2) to (8)

³ <https://www.tasnetworks.com.au/config/getattachment/392a5153-c430-406c-9735-090c5e209836/tn-ir052-tariff-structure-statement-2019-2024-public.pdf>

⁴ These documents are available on TasNetworks' website at: <https://www.tasnetworks.com.au/Poles-and-Wires/Pricing/Our-prices>.

In addition, we have developed and published fact sheets to support our customers understanding of TasNetworks; network prices:

- Time of use pricing
- Residential prices for 2022-23
- Small business prices for 2022-23

2.4 Structure of this document

Section	Purpose
1 Glossary	The glossary provides the definitions of key terms and acronyms used throughout this Annual Pricing Proposal.
2 Introduction	Outlines the compliance requirements and purpose of this Annual Pricing Proposal.
3 Who is TasNetworks	Provides an overview of the role TasNetworks plays in delivering power to customers and how network charges are regulated.
4 Key changes	Outlines the key changes that this pricing proposal will have on our key customer groups – residential, low voltage business, irrigation and high voltage business.
5 TasNetworks pricing strategy	Summarises our pricing strategy as set out in our Tariff Structure Statement 2019-24.
6 Standard control services	Describes the methodology used by TasNetworks to calculate tariffs, including its compliance with the NER and also the pricing-related obligations placed on TasNetworks by the AER's Distribution Determination. Shows the difference in charges between 2021-22 and 2022-23 for each network tariff, as well as the percentage change.
7 Alternative control services	Explains the tariff classes applying to alternative control services, set out the prices applying the 2022-23 to metering, public lighting and ancillary services (both fee based services and quoted services), variations and impacts.
8 Confidentiality	Details which parts of this Annual Distribution Pricing Proposal are confidential and provides reasons in support of any confidentiality claims.
9 Further information	Provides additional information on where to access our pricing schedules and tariff application guides.
Appendices	Purpose
A Compliance checklist	Details TasNetworks' compliance with the requirements of the NER as they relate to Annual Distribution Pricing Proposals.
B Standard control services	Provides the formulae used to calculate our network tariffs and how customers are assigned to tariff classes based on the NER and pricing principles. It provides details of each tariff including a description of each tariff class and the charging parameters making up each tariff. Outlines the 2022-23 proposed network tariffs.
C Alternative control services	Provides the formulae used to calculate our network tariffs and how customers are assigned to tariffs and a description of each tariff. The 2022-23 proposed alternative control tariffs are outlined.

2.5 Further information

Customers and retailers who are uncertain about the network pricing process or the pricing arrangements that may be applicable to their particular circumstances are encouraged to contact TasNetworks at:

Leader Regulation
PO Box 606
Moonah TAS 7009
E-mail: regulation@tasnetworks.com.au

2.6 Overview of compliance obligations

The matters that must be satisfied by the publication of this Annual Distribution Pricing Proposal are set out in clause 6.18 of the NER. TasNetworks' compliance with these requirements is detailed in Appendix A – Compliance Checklist.

3 Who is TasNetworks

3.1 Delivering your power

TasNetworks is a combined Distribution Network Service Provider (**DNSP**) and Transmission Network Service Provider (**TNSP**) which owns and operates Tasmania's Transmission and Distribution electricity networks.

In other parts of the country, ownership of the high voltage transmission network (that connect power stations to the network) and ownership of the lower voltage distribution network (that deliver power down every street) is generally separated. But in Tasmania, TasNetworks provides both transmission network services (via the large metal towers and lines) and distribution network services (via the poles and wires). This makes for greater efficiencies and allows us to focus on managing 'one' Tasmanian network.

TasNetworks' distribution services takes the high voltage power from the transmission network to deliver low voltage electricity to 290,000 Tasmanian households, businesses and organisations throughout the State, while operating and maintaining approximately 32,000 public lights on behalf of the majority of councils and other Government road authorities.

The combined total assets of the TNSP and DNSP, of over \$3 billion, provides the electricity network that ensures our customers receive a safe, reliable and affordable electricity supply.

3.2 Metering services

The metering services provided by TasNetworks relate to the reading and maintenance of standard meters installed prior to December 2017. Since 1 December 2017, the nature of our involvement in the provision of meters for residential and small business customers has changed as a result of alterations made to the regulatory framework applying to metering services across the NEM. Those changes mean that retailers are now responsible for providing and maintaining advanced meters on a new and replacement basis. TasNetworks will continue to support its existing fleet of meters but is not involved with the provision or reading of advanced meters installed since 1 December 2017.

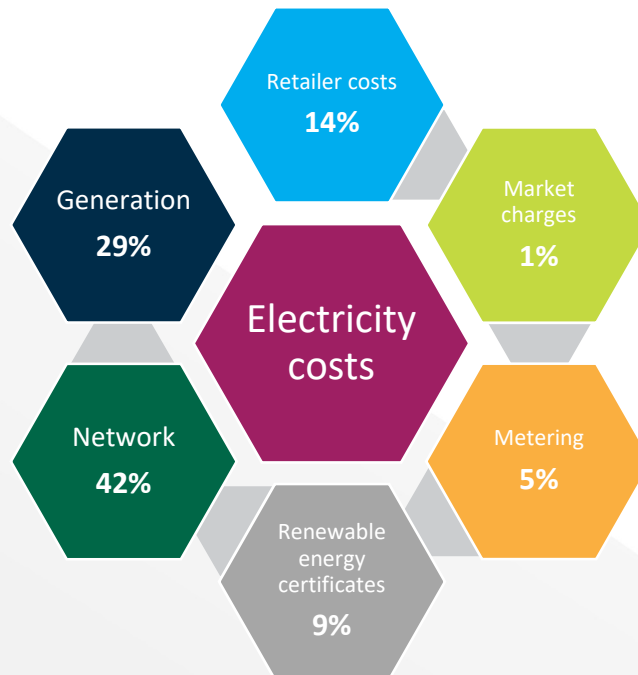
3.3 Our network charges are regulated

The amount of revenue we are able to recover from our customers is approved by the AER. Every five years the AER sets our revenue allowances in advance and then each year approves the network prices we charge to recover that revenue in the following year. This Annual Pricing Proposal details the prices we propose to charge to recover our allowable revenue for the 2022-23 regulatory year.

The charges that customers see on their electricity bill from their retailer include the cost of delivering power to homes and businesses (network charges), the cost of generation and the cost of providing retail services.

The network charges make up approximately forty two per cent of the cost of electricity for most households and small businesses in Tasmania. Network charges include the cost of transporting electricity via both the high voltage transmission network and the lower voltage poles, wires and underground cables that make up the distribution network (Diagram 1).

Diagram 1 – Indicative cost components of electricity costs for a typical residential or small business customer



Network tariffs are the fees and charges we use to recover the cost of building, running and maintaining the electricity network in Tasmania. Every household, business and organisation connected to the network makes a contribution towards this cost. However, rather than charge customers directly for their use of the network, we charge their retailer, who then passes the cost of the network on to customers through the retail tariffs.

4 Key changes in this annual distribution pricing proposal

In 2022-23, both residential and small business customers are, on average, better off on one of our time of use consumption network tariffs, when compared to the respective flat rate network tariff. By switching from a flat rate to a time of use network tariff, residential customers can save, on average, \$15 per year and small business customers around \$163 per year.

4.1 Key changes for residential network tariffs

An increasing number of residential customers are switching to the time of use consumption based network tariff (TAS93) that offers lower network charges at off peak times – including weekends in their entirety. The majority of the remaining residential customers use a combination of two network tariffs – the residential low voltage general tariff (TAS31) for general power and lighting, and the uncontrolled low voltage heating tariff (TAS41) for home heating and/or hot water.

The network charges incurred by a typical residential customer will increase by around 0.4 per cent in 2022-23.

Appendix B.6 compares the charges applying to these network tariffs in 2022-23 with the charges applying in the previous year, 2021-22.

4.2 Key changes for low voltage business tariffs

Small business customers are increasingly realising the advantages of a time of use consumption based network tariff (TAS94). This network tariff offers lower network charges during both the shoulder (weekend days – 7am to 10pm) and off peak (overnight - 10pm to 7am) times. The majority of the remaining low voltage small businesses customers use the flat rate consumption based network tariff (TAS22).

The network charges incurred by a medium usage small business customer on the TAS22 network tariff is approximately 0.4 per cent higher than they were in 2021-22. For small business customers supplied under the time of use consumption based network tariff (TAS94), charges will increase by approximately 1.9 per cent in 2022-23.

Appendix B.6 compares the charges applying to these network tariffs in 2022-23 with the charges applying in the previous year, 2021-22.

5 TasNetworks pricing strategy

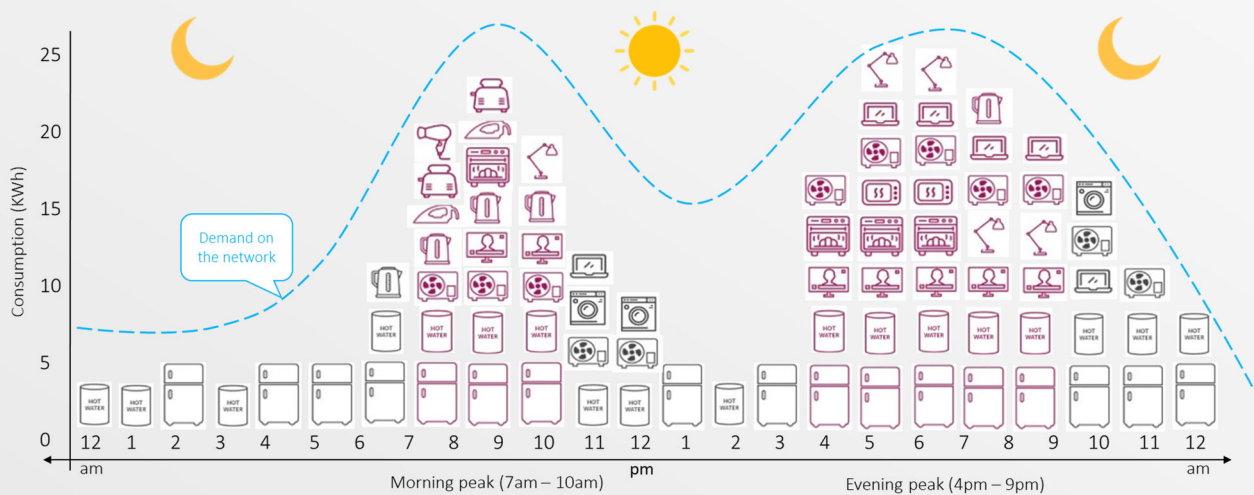
5.1 Future ready pricing structures

Rather than using less electricity, time of use network tariffs offer customers the opportunity to reduce their total cost of electricity by shifting consumption into cheaper off peak periods and enable customers with solar PV to offset the power they generate against their electricity consumption.

Across Australia, customers are changing how they use electricity. The growth of household solar PV, electric vehicles and batteries is changing how customers engage with their electricity network. More options are available for customers to control their energy needs and manage their usage. However, many pricing structures were introduced prior to the advent of this technology and established when customers had vastly different expectations of the network.

Currently, most customers pay a flat rate for their electricity and their use of our network, and their bills reflect the amount of electricity they have used over a certain period of time. The problem with this arrangement is that it does not take into account when customers use electricity. The cost of providing the network isn't so much driven by the amount of electricity customers use over time, but by the capacity needed to meet generally short peaks in usage - which typically occur on cold weekday mornings and evenings, (refer Diagram 2). Therefore, TasNetworks is supporting our customers to manage their own energy supply by providing more suitable pricing structures, such as time of use pricing, which provides incentives to customers to use the network more efficiently, by providing a better signal for the cost of operating the network.

Diagram 2 – How our everyday usage contributes to short peaks on the network



In the longer term, time of use pricing is designed to support reduced expenditure on augmenting the network, meaning we can deliver more electricity without spending money on adding network capacity to cope with growing peaks in demand. For customers looking to minimise their electricity costs, time of use network charges offer the opportunity to reduce bills by shifting some consumption into cheaper off peak periods – potentially without any loss of comfort or convenience – rather than just using less electricity. Our time of use network tariffs also enable customers with solar PV to apply the power they generate to their electricity consumption without any additional behind the meter investment.

5.2 Switching to time of use pricing

Since 1 July 2019, consumption based time of use network tariffs have become the default for new small business and residential premises, as well as small businesses and households that change their network connection or have an advanced meter installed.

Customers are already switching to time of use network tariffs. One of the triggers for reassigning customers to these network tariffs is the installation of an advanced (or 'smart') meter, which has the ability to record the information needed to charge customers based on the time they use electricity.

To that end, consumption based time of use network tariffs became the default network tariffs for all new small business and residential connections from 1 July 2019. They are also being applied to small business customers and home owners that modify or upgrade their connections, as well as small businesses and homes that have their meter(s) replaced with an advanced meter. However, time of use network tariffs aren't applied immediately. A 12-month delay is applied to each customer to enable a year's worth of metering data to be collected before the changeover to a time of use network tariff actually takes effect. That data will be available to inform customers' thinking about the retail (and network) tariffs they would like to be charged under in the future. Retailers are then provided two months to notify TasNetworks of a customers' choice of retail (and network) tariff. At the conclusion of this period, TasNetworks will begin charging the customers' retailer on a time of use basis, unless the customer elects, through their retailer, to opt out of the default time of use network tariff.

The continued roll out of advanced meters enable customers to obtain timely and more detailed information on their energy use. This provides those customers the ability to take advantage of the opportunities that are available through time of use network tariffs, and adjust their consumption habits to lower their electricity costs.

5.3 Direction of pricing

We're also adjusting the prices of some of our long standing network tariffs which don't reflect the costs associated with the demands that customers on those pricing arrangements make on the network. For example, we're gradually lifting the price of the dedicated home heating and hot water network tariff (TAS41) so that, eventually, its price will be similar to the residential general power and lighting tariff (TAS31). But this is a gradual process and we're not about to abolish such a widely used network tariff and transition customers onto an alternative. However, we expect that time of use network charges will become the norm in the future.

Time of use charges for the use of the electricity network will help customers recognise and pay for the value the network provides to them. Time of use prices will also help customers better understand the costs and benefits of solar PV, batteries, electric vehicles and energy efficiency measures when making investment and energy use decisions.

As at the end of 2021, approximately 40.4 per cent of customers have advanced meters – 41.9 per cent residential and 31.6 per cent business. However the uptake of cost reflective network tariffs has only reached 17.3 per cent of all residential customers and 26.5 per cent for business customers.

TasNetworks provides electricity retailers information and updates on our tariff suite to help them improve customers' understanding of their electricity usage, including what different network tariffs might mean for customers and how customers can manage their use of electricity in a way that maximises the value they get from their electricity supply while minimising the cost.

6 Standard control services

This section details TasNetworks' SCS, the distribution network tariff classes and related network tariff structures. It sets out how our network tariffs have been constructed and how they comply with the requirements of the NER and TasNetworks' 2019-24 Distribution Determination.

6.1 What are standard control services

Standard control services refers to an approach taken by the AER to the regulation of network charges on services that are relied on by the majority of customers. The revenue that TasNetworks generates from providing these services is capped by the AER for the five year regulatory period and we cannot recover more or less revenue in total from our customers.

The annual revenue is recovered through our general network charges (network tariffs), and pays for the building, running and maintenance of the electricity distribution network. The allocation of revenue must reflect the total efficient costs of serving the retail customers that are assigned to each network tariff and must, in aggregate, recover the expected revenue for the relevant services⁵. Allocating the revenue involves determining the allowed revenue, splitting the revenue across the network tariff classes (and their network tariffs), and setting the prices for the network tariff parameters to recover from the customer the revenue allocated to that network tariff class (and network tariff).

6.2 Network tariff classes

The network tariff classes are based on TasNetworks grouping customers on an economically efficient basis⁶ that adequately reflects customer characteristics in regards to the costs of serving those customers.

The NER set out a range of requirements relating to network tariff classes which have been addressed in our TSS. Each customer is a member of at least one network tariff class⁷. Network tariff classes comprise only of customers to whom standard control services are supplied, or alternative control services, but not both. That is, no network tariff class comprises customers to whom both standard control services and alternative control services are supplied⁸.

For the 2019-24 regulatory control period, TasNetworks has the following network tariff classes:

- Residential low voltage
- Small business low voltage
- Large business low voltage
- Irrigation
- Large business high voltage
- Individual tariff calculation
- Uncontrolled energy
- Controlled energy
- Unmetered supply
- Street lighting

⁵ NER, Clause 6.18.5(g)

⁶ NER, Clause 6.18.3(d)

⁷ NER, Clause 6.18.3(b)

⁸ NER, Clause 6.18.3(c)

6.3 Network tariff assignments and parameters

6.3.1 Assigning customers to network tariff classes

Clause 6.18.4(a) of the NER sets out the principles governing the assignment or re-assignment of retail customers to network tariff classes for the 2019-24 regulatory control period.

The assessment for network tariff classes are based on the:

- nature of a customer's usage, i.e. whether they are a residential or business customer;
- customer's connection to the distribution network, i.e. whether they are connected to the low voltage (LV) or high voltage (HV) network; and
- usage profile for customers, e.g. how customers consume energy.

Section 4 of our TSS sets out the principles TasNetworks must adhere to in assigning customers to network tariff classes and applies to all direct control services (i.e. both standard control and alternative control services). The assignment processes for standard control services are discussed in more detail in the Network Tariff Application and Price Guide 2022-23 that has been submitted to the AER in conjunction with this Annual Distribution Pricing Proposal.

6.3.2 Network tariff parameters

TasNetworks uses four general types of network tariff parameters which can be weighted, measured and combined in different ways to provide a wide range of network tariff structures (Table 3).

Table 1 – Distribution network tariff parameters

Parameters	Description
Service Charge	\$/time period (cents per day) which does not change with usage, demand or capacity.
Consumption Charge (usage)	\$/time period (actual usage – kWh based on consumption during the billing period. Consumption charges may vary with time of day, week or season. Charges are based on the total level of usage within the defined billing period.
Demand Charge	\$/kW or \$/kVA (actual) based on either: The actual demand within the defined charging windows in the billing period. The average of the four highest 30 minute demand periods within the defined charging windows in a billing period. Demand charges may vary with the time of day, season or location, with charges being based on demand recorded within the defined billing period.
Specified Demand Charge	\$/kW or \$/kVA based on agreed maximum demand for a defined billing period, not actual demand. A customer pays for capacity made available, rather than necessarily used. Excess charges apply if actual demand exceeds specified demand. Capacity charges may vary with the time of day or season, with charges being based on capacity within the defined billing period.

Components of TasNetworks' network tariffs can be passed through to customers by retailers designing innovative products and services to meet the needs of their customers.

6.3.3 Taking time of use into account

Some of the parameters within a network tariff may be further split into time periods. 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 service is driven by building and replacing assets to adequately cater for peaks in demand. In addition to dividing a single 24-hour period into

multiple charging windows, time of use periods can be used to distinguish between electricity usages on weekdays and weekends, as well as difference ‘seasons’⁹.

These time periods are set by determining when in the day, week or time of year our system typically experiences peak loads or capacity constraints. Some consumption and demand based network tariffs have these time of use periods and different prices apply to the use of the network during each of these periods.

6.3.4 Recovery of Distribution Use of System

Network tariffs and charging parameters are designed to recover the approved revenue. The network charging parameters adopted by TasNetworks for the recovery of standard control services distribution use of system (**DUoS**) tariffs are detailed in Appendix B.2.

6.3.5 System to assess and review the basis on which a customer is charged

In accordance with the AER’s Distribution Determination, TasNetworks’ Annual Distribution Pricing Proposal must contain provision for a system of assessment and review of the basis on which a customer is charged, if the charging parameters for a particular network tariff result in a basis of charge that varies according to the usage or load profile of the customer. TasNetworks considers that the basis of charge may vary according to usage or load profile where either:

- a change in the usage or load profile of a customer indicates that a different network tariff is applicable; or
- within a network tariff, the charging parameter changes according to the customer’s usage.

TasNetworks reviews the assignment of customers to its network tariff classes as part of the annual process of developing its network tariffs. TasNetworks, in conjunction with retailers, has set procedures and criteria to determine when it may be appropriate for a customer to be reassigned to a differing network tariff or network tariff class. 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 network tariff is appropriate to the assumed usage or load profile.

In addition to this annual review process, customers (or a customer’s retailer) are able to request that TasNetworks reviews and changes a network tariff assignment in the event of variation to the customer’s usage or load profile. Provided TasNetworks agrees to a change in network tariff, this change can take effect during a regulatory year. TasNetworks uses the procedures and criteria discussed above to determine if it is appropriate to change the network tariff assigned to a customer.

6.3.6 Transaction costs

Clause 6.18.3(d)(2) of the NER requires each network tariff and, if it consists of two or more charging parameters, each charging parameter for a network tariff class to be developed having regard to transaction costs associated with the network tariff or charging parameter.

A combination of various parameters has been used to ensure that appropriate pricing signals are provided to customers. However, the number and design of these parameters has been selected with regard to minimising the associated transaction costs.

TasNetworks has not altered the structure or format of its network tariffs from those included in the Annual Distribution Pricing Proposal of the previous regulatory year.

⁹ The time of use seasonality may not correspond with the four seasons – winter, summer, spring, autumn.

6.4 Pricing requirements, principles and the network tariff setting methodology

Standard control refers to an approach taken by the AER to the regulation of prices which involves setting a cap on the amount of revenue that we are permitted to recover. Most of our revenue is earned through network tariffs and the amount of that revenue each year is capped by the AER. This section provides an overview of how the total allowable revenue is to be recovered through TasNetworks' network tariffs.

6.4.1 Control mechanism

The form of control mechanism (including the X-factor) is a revenue cap. The allowable revenue for TasNetworks in any given regulatory year is the total annual revenue (**TAR**), plus any adjustment required to move the DUoS overs and unders account close to zero (refer to Equation 1 in Appendix B.1).

The 2022-23 network tariffs and charging parameters set out in this Annual Distribution Pricing Proposal are based on the TAR set by the AER in its 2019-24 Distribution Determination for TasNetworks.

6.4.2 Revenue cap and total allowable revenue

TasNetworks' TAR is calculated in accordance with the formula outlined in Equation 1 (Appendix B.1) which was prescribed by the AER in its 2019-24 Distribution Determination for TasNetworks. Table 2 sets out our total allowable distribution revenue (revenue cap) calculation for the 2022-23 regulatory year.

Table 2 – Allowable distribution revenue (\$ millions)¹⁰

	Rate	2022-23
Annual revenue (AAR_{t-1})		\$254.30
Inflation (ΔCPI)	3.50%	\$8.90
X-factor for 2022-23 (X_t)	0.82%	\$2.09
STPIS 1.2 adjustment (S_t)	-0.70%	(\$1.77)
Adjusted annual smoothed revenue (AAR_t)¹¹		\$263.51
I-factor (incentive scheme payments applied in 2022-23) (I_t)		-
C-factor (annual adjustment factors applied in 2022-23) (C_t)		-
B-factor (approved cost pass-throughs applied in 2022-23) (B_t)		(\$6.52)
Total allowable revenue for 2022-23 (TAR_t)¹²		\$256.99

¹⁰ Output table 2 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022].xlsx

¹¹ Equation 1 – Revenue cap formula (line 4)

¹² Equation 1 – Revenue cap formula (line 2)

6.4.3 Weighted average revenue

Table 3 sets out the expected weighted average revenue for the regulatory year and the current regulatory year¹³.

Table 3 – Weighted average revenue (\$ millions)¹⁴

Network tariff class	2021-22 Weighted average revenue	2022-23 Anticipated revenue	Change (%)
Residential	\$121.665	\$121.081	-0.48%
Small business low voltage	\$59.308	\$60.651	2.26%
Large business low voltage	\$15.445	\$14.890	-3.59%
Irrigation	\$7.438	\$7.900	6.21%
Large business high voltage	\$7.768	\$7.542	-2.91%
Uncontrolled energy	\$37.674	\$38.266	1.57%
Controlled energy	\$1.261	\$1.280	1.53%
Unmetered	\$0.916	\$0.899	-1.79%
Street lighting	\$1.135	\$1.112	-2.06%
ITC	\$2.206	\$2.197	-0.43%
Total	\$254.815	\$255.818	0.39%

6.4.4 DUoS unders and overs

As a requirement of its Distribution Determination for TasNetworks, the AER requires us to provide a DUoS unders and overs account for the most recently completed regulatory year¹⁵. Table 4 outlines the DUoS unders and overs calculation and provides separate identification of any under or over recovery relating to prior years included in the current year revenue.

Table 4 – Distribution unders and overs account balance (\$ millions)¹⁶

Network tariff Class	2019-20 Actual	2020-21 Actual	2021-22 Estimate	2022-23 Forecast
(A) Revenue from DUoS charges	\$243.884	\$239.249	\$254.815	\$255.818
(B) Less TAR (net of unders/overs adjustment)	\$236.381	\$234.539	\$248.573	\$256.991
(C) Revenue deliberately under-recovered in year	\$0.980	\$0.671	\$0.615	\$0.444
(Under) / Over recovery of revenue (A - B + C)	\$8.483	\$5.382	\$6.858	(\$0.729)

¹³ Clause 6.18.2(b)(4), NER. Refer to output table 1 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022].xlsx

¹⁴ Output table 1 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022].xlsx

¹⁵ Clause 6.18.2(b)(6), NER. Refer to output table 2 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022].xlsx

¹⁶ Output table 2 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022].xlsx

Network tariff Class	2019-20 Actual	2020-21 Actual	2021-22 Estimate	2022-23 Forecast
Distribution overs/unders account				
Opening balance	\$5.176	\$11.181	\$5.768	\$6.794
Interest on opening balance	\$0.239	\$0.506	\$0.194	\$0.408
(Under)/over for regulatory year	\$5.636	(\$5.790)	\$0.818	(\$7.724)
Interest on (under)/over for regulatory year	\$0.129	(\$0.130)	\$0.014	(\$0.228)
Closing balance	\$11.181	\$5.768	\$6.794	(\$0.751)

6.4.5 Side constraints

Clause 6.18.6(b) of the NER requires that, within a given regulatory control period, the revenue raised from a particular network tariff class through network tariffs applying to standard control services must not increase from year to year by more than the permissible percentages set out in the NER. This limitation on network tariffs and the revenue they can recover is referred to as a side constraint. Table 5 sets out the side constraints for 2022-23 and demonstrates compliance with Clause 6.18.6 of the NER for each individual network tariff class. TasNetworks' permissible percentage movement for 2022-23 is 5.39 per cent.

In accordance with the AER's Distribution Determination, the formula in Equation 6 (Appendix B.1) is to be used to determine side constraints for each network tariff class.

Table 5 – Side constraints revenue (\$ millions)¹⁷

Network tariff class	2021-22 prices with 2022-23 quantities	2022-23 Anticipated revenue	(%)
Residential	\$124.329	\$121.081	-2.61%
Small business low voltage	\$60.373	\$60.651	0.46%
Large business low voltage	\$15.052	\$14.890	-1.08%
Irrigation	\$7.746	\$7.900	1.98%
Large business high voltage	\$7.585	\$7.542	-0.56%
Uncontrolled energy	\$36.427	\$38.266	5.05%
Controlled energy	\$1.258	\$1.280	1.71%
Unmetered supplies	\$0.897	\$0.899	0.23%
Street lighting	\$1.099	\$1.112	1.20%
ITC	\$2.208	\$2.197	-0.52%
Total	\$256.975	\$255.818	-0.45%

¹⁷ Clause 6.18.6(b), NER. Refer to output table 3 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022].xlsx

6.4.6 2022-23 pricing and indicative prices provided in the TSS

Our TSS outlines the assumptions we used to forecast indicative network use of system (NUoS) prices. These assumptions have changed from our TSS to our actual proposed 2022-23 NUoS prices. The differences between our indicative 2022-23 NUoS prices and our pricing proposal prices are predominately driven by changes to total allowable revenue (as identified in Table 6) including:

- a lower maximum allowed revenue;
- much higher than expected inflation;
- reduced cost of debt;
- a reduction in the movement of the STPIS; and
- significantly lower than expected TUoS charges for 2022-23.

Table 6 – Changes in assumptions for indicative pricing to pricing proposal (\$ millions)

	2022-23 Pricing proposal	TSS	Variance
Annual revenue (AAR_{t-1})	\$254.30	\$269.04	(\$14.74)
Inflation (ΔCPI)	\$8.90	\$6.59	\$2.31
X-factor for 2022-23 (X_t)	\$2.09	\$3.34	(\$1.25)
STPIS 1.2 adjustment (S_t)	(\$1.77)	-	(\$1.77)
Adjusted annual smoothed revenue (AAR_t)¹⁸	263.51	\$278.97	(\$15.46)
I-factor (incentive scheme payments applied in 2022-23) (I_t)	-	-	-
C-factor (annual adjustment factors applied in 2022-23) (C_t)	-	-	-
B-factor (approved cost pass-throughs applied in 2022-23) (B_t)	(\$6.52)	-	(\$6.52)
Total allowable revenue for 2022-23 (TAR_t)¹⁹	\$256.99	\$278.97	(\$21.98)
Charges pad to TNSP	\$74.35	\$85.11	(\$10.76)
TUoS unders/overs amount	(\$1.94)	-	(\$1.94)

6.5 Pricing principles

Clause 6.18.5(e)-(j) of the NER specify that TasNetworks' TSS must comply with the pricing principles for direct control services. The objectives of network pricing is that the charges should reflect TasNetworks' efficient costs of providing those direct control services to the retail customer²⁰. The NER set out the pricing principles for distributors.

¹⁸ Equation 1 – Revenue cap formula (line 4)

¹⁹ Equation 1 – Revenue cap formula (line 2)

²⁰ NER, Clause 6.18.5(a)

TasNetworks' TSS sets out the pricing principles that are applied in our network tariff setting processes, which include:

- the revenue for each network tariff class lies between the stand-alone and avoidable costs for that network tariff class²¹;
- where applicable, the peak demand parameter of the network tariff is set at a level to recover the long run marginal cost for that tariff²²;
- that overall forecast revenue, when summed across the network tariff class, is not more than the revenue allowance approved by the AER²³ after allowing for the under or over-recoveries in prior year, adjustments for actual inflation and pass-through, such as the electrical safety levy;
- the revenue for each network tariff is at, or moving towards, recovery of the total efficient cost for that network tariff²⁴; and
- we have considered and managed annual bill impacts on our customers²⁵, and ensured the annual percentage changes in network tariffs classes are within the side constraints approved by the AER²⁶.

TasNetworks' compliance with the NER are set out in Appendix A.

6.5.1 Stand-alone and avoidable costs

Clause 6.18.5(e) requires TasNetworks' to recover revenue for each network tariff class on or between the stand-alone and avoidable costs of serving retail customers within each network tariff class. Therefore, the stand-alone and avoidable costs for a network tariff class must be set between the costs necessary to only supply network that tariff class (i.e. a standalone price) and the costs that could be avoided if that network tariff class were not supplied at all (i.e. avoidable cost).

The NER do not specifically define avoidable and stand-alone costs or set out the methodology that should be applied to calculate these costs. TasNetworks has interpreted the upper and lower bounds for each network tariff class as follows:

- Stand-alone cost (upper bound) – we calculate this amount as the cost of servicing all customers under that network tariff class, assuming no other network tariff classes are being served from our distribution system. This is the cost that we would theoretically incur if we provided services solely to that network tariff class.
- Avoidable cost (lower bound) – we calculate this amount as the total cost avoided if that network tariff class was not served, while other classes remained serviced. This represents the dedicated costs incurred to provide services to that network tariff class.

Setting revenue bounds based on this principle ensure economically efficient pricing, i.e. it would be inefficient for networks to supply customer if these were charged below avoidable costs; and it would be economically beneficial for retail customer to bypass existing infrastructure to switch to other, less efficient supply options if they were charged above the stand-alone cost.

Table 7 shows that TasNetworks' stand-alone and avoidable costs comply with the requirements of clause 6.18.5(e) of the NER.

²¹ NER, Clause 6.18.5(e)

²² NER, Clause 6.18.5(f)

²³ NER, Clause 6.18.5(g)(2)

²⁴ NER, Clause 6.18.5(g)(1)

²⁵ NER, Clause 6.18.5(h)

²⁶ NER, Clause 6.18.6

Table 7 – Compliance of TasNetworks stand-alone and avoidable cost calculations (\$ millions)²⁷

Network tariff Class	Avoidable	Forecast revenue	Stand-alone	Compliance check
Residential	\$9.14	\$121.08	\$1,105.12	OK
Small business (LV)	\$3.38	\$60.65	\$1,318.56	OK
Large business (LV)	\$1.26	\$14.89	\$658.85	OK
Irrigation	\$0.59	\$7.90	\$219.78	OK
Large business (HV)	\$0.43	\$7.54	\$658.02	OK
Uncontrolled energy	-	\$38.27	\$219.20	OK
Controlled energy	-	\$1.28	\$438.39	OK
Unmetered supply	\$0.04	\$0.90	\$219.24	OK
Street lighting	\$0.09	\$1.11	\$219.29	OK
ITC	\$0.04	\$2.20	\$219.24	OK

6.5.2 Long run marginal cost

Clause 6.18.5(f) of the NER requires that each network tariff must be based on the long run marginal cost (LRMC) of providing the service to retail customers assigned to that class, with the method of calculating such costs, and the manner in which that method is applied to be determined having regard to:

- the costs and benefits associated with calculating, implementing and applying the method;
- the additional costs likely to be associated with meeting (incremental) demand from the customers that are assigned to the network tariff at times of greatest utilisation for the relevant part of the distribution network; and
- the location of customers that are assigned to that network tariff and the extent to which costs vary between different locations.

The purpose of LRMC is to encourage the optimal use of the existing network infrastructure while providing a signal to the user of the cost of adding an additional unit of the service being provided – ultimately ensuring that customers obtain the maximum benefit from the network that has already been constructed.

Setting our network tariffs based on the LRMC will provide our customers with a cost reflective signal to encourage efficient electricity use and reduce inefficient augmentation of the electricity network.

Section C.2 of our TSS sets out our approach to estimating LRMC using the average incremental cost methodology:

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

²⁷ NER, Clause 6.18.5(e). Refer to output table 4 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022].xlsx

Where:

- **New network capacity** is the forecast capital expenditure that have been categorised as being 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 LRMC of our distribution network is summarised in Table 8.

Table 8 – Network level long run marginal cost

Network Tariff class	Network tariff	Network tariff code	LRMC (\$/kW) 2022-23
Residential	Residential low voltage time of use consumption	TAS93	146
	Residential low voltage general light and power	TAS31	146
	Residential low voltage time of use demand	TAS87	146
	Residential low voltage time of use distributed energy resources	TAS97	146
	Residential low voltage PAYG	TAS101	146
	Residential low voltage PAYG time of use	TAS92	146
Small business low voltage	Small business low voltage time of use consumption	TAS94	112
	Small business low voltage general light and power	TAS22	139
	Small business low voltage time of use demand	TAS88	112
	Small business low voltage time of use distributed energy resources	TAS98	112
Large business low voltage	Business low voltage time of use demand	TAS89	84
	Business low voltage kVA demand	TAS82	84
Irrigation	Low voltage time of use irrigation	TAS75	116
Large business high voltage	Business high voltage kVA specified demand <2MVA	TASSDM	93
	Business high voltage kVA specified demand >2MVA	TAS15	108
ITC	Individual tariff calculation	TASCUS	108
Uncontrolled energy	Uncontrolled low voltage heating	TAS41	101
Controlled energy	Controlled low voltage energy – night period only	TAS63	110
	Controlled low voltage energy – off-peak with afternoon boost	TAS61	110
Unmetered supplies	Unmetered supply low voltage general	TASUMS	143
Street lighting	Unmetered supply low voltage public lighting	TASUMSSL	143

6.5.3 Total efficient costs

TasNetworks has a revenue cap which represents the maximum amount of revenue that can be recovered each year. Under the NER²⁸, the revenue that is expected to be recovered from each network tariff must reflect the total efficient costs of serving the retail customers assigned to that network tariff [and] when summed with the revenue expected from all network tariffs, permit TasNetworks to recover the expected revenue for the services.

The Total Efficient Cost (TEC) allocates our total annual revenue across our network tariffs to reflect the cost of supplying those retail customers who are using those network tariffs – this determines whether the costs generated from a customers' (or group of customers) use of the network is allocated efficiently.

6.5.4 Residual costs

The revenue to be recovered from each network tariff must recover the total efficient costs of providing network services in a way that minimises distortions to price signals that then encourage efficient use of the network by customers. Distortions in energy price signals need to be minimised for efficient use of the service that result from network tariffs being compliant with the LRMC²⁹. DUoS residual costs are allocated to network tariffs on the basis of the previous year's allocation and the current year's consumption volumes. This ensure the level of DUoS revenue expected to be recovered from each network tariff (and across all network tariffs) complies with Clauses 6.18.5(g) and 6.18.5(h).

Each year TasNetworks ensures that the network tariffs reflect the total efficient costs of supplying each customer assigned to each network tariff be basing network tariffs on LRMC.

6.5.5 Setting supply charges for individually calculated tariffs

For major business customers, individually tariff calculations (ITC) are performed. These customers have unique distribution supply arrangements and/or are able to bypass some components of distribution network level.

6.5.6 Sub-threshold tariffs

Clause 6.18.1C(a) of the NER require that no later than four months before the start of a regulatory year, a DNSP may notify the AER, affected retailers and affected retail customers of a new proposed network tariff (a relevant network tariff) that is determined otherwise than in accordance with the DNSP's current TSS.

There are no new proposed network tariffs for this regulatory year.

6.5.7 National Electricity Rules and applicable regulatory instruments

Clause 6.18.5(j) of the NER requires that a network tariff must comply with the NER and all applicable regulatory instruments. Our existing network tariffs comply with this principle.

6.6 Transmission charges

Electricity is received into TasNetworks' distribution network primarily from TasNetworks' transmission network. The transmission network is separately regulated by the AER and, for the purposes of the transmission cost recovery and billing, the distribution network's connections with the transmission

²⁸ NER, Clause 6.18.5(g)

²⁹ NER, Clause 6.18.5(g)(3)

network are treated as if they belong to an independent party. TUoS charges levied on the distribution network are, in turn, recovered by TasNetworks from customers connected to the distribution network as a parameter of network tariffs.

Clause 6.18.2(b) requires TasNetworks to set out how the designated pricing proposal charges (**DPPC**³⁰) it incurs is being passed onto customers.

To recover transmission costs, the network tariffs applied to customers connected to the distribution network are based on the expected TUoS charges that will be incurred at each connection point with the distribution network. These are aggregated and then adjusted for past under or over recoveries of TUoS by the distributor, as per the AER's Distribution determination for TasNetworks. TUoS charges are allocated to network tariff classes using the TEC model. The TUoS charges applied to the distribution network and recovered from customers connected to the distribution network comprise variable charges only.

The network charging parameters adopted by TasNetworks for the recovery of standard control services TUoS tariffs are detailed in Table 26, Appendix B.8.

6.6.1 Transmission charges

The distribution network in Tasmania has in excess of 30 transmission connection points, each with its own pricing. TasNetworks is required to provide all low voltage customers in Tasmania with a 'postage stamp' price, irrespective of the transmission connection point which supplies the distribution network in their area. Therefore, transmission charges are considered as a direct pass-through, with variations in transmission charges being passed through to all installations on a pro-rata basis through network tariffs. However, locational pricing signals within the transmission network are preserved for larger, high voltage customers that take their supply from the distribution network. These largest customers are generally covered by the individual tariff calculation and business high voltage kVA specified (>2MVA) network tariffs (ITC and TAS15).

The transmission charges imposed on TasNetworks' distribution network form the basis of the TUoS charges embedded within the network tariffs TasNetworks charges customers connected to the distribution network.

6.6.2 Avoided TUoS

TasNetworks must pay avoided Customer TUoS charges (**avoided TUoS**) to embedded generators who have generated electricity and transmitted this energy into TasNetworks' distribution network, thereby reducing TasNetworks' need to import energy from the transmission network and avoiding some TUoS charges. Where prices for the locational component of prescribed TUoS services were in force at the relevant transmission network connection point throughout the relevant financial year, TasNetworks must:

- (a) determine the charges for the locational component of prescribed TUoS services that would have been payable by TasNetworks had the embedded generator not injected any energy at its connection point during that financial year;
- (b) determine the amount by which the charges calculated in (a) exceed the amount for the locational component of prescribed TUoS services actually payable by TasNetworks; and
- (c) credit the value from (b) to the embedded generator.

³⁰ DPPC is also referred to in this document as Transmission Use of System (**TUoS**)

Avoided TUoS payments to embedded generators reflect the avoided costs of upstream transmission network reinforcement within Tasmania. As such, the benefits primarily relate to all customers – that is, avoided TUoS does not solely impact on the connection point to which an embedded generator is connected. Avoided TUoS payments have, therefore, been assigned to all network tariff classes.

6.6.3 TUoS unders and overs account

Clause 6.18.2(b) of the NER requires us to provide a TUoS unders and overs account for the most recently completed regulatory year. The annual SCS pricing model to this Annual Distribution Pricing Proposal outlines the unders and overs calculation and provides separate identification of any under or over-recovery relating to prior years included in the current year revenue.

Table 8 provides the forecasts 30 June 2023 balance of TasNetworks' TUoS unders and overs account. The forecast under recovery balance is \$0.07 million.

Table 9 – Transmission unders and overs account balance (\$ millions)³¹

Network tariff Class	2019-20 Actual	2020-21 Actual	2021-22 Estimate	2022-23 Forecast
(A) Revenue from TUoS charges	\$79.017	\$74.472	\$67.943	\$72.223
(B) Less forecast TUoS	\$74.529	\$71.381	\$66.236	\$72.406
(C) Revenue deliberately under-recovered in year	\$0.275	\$0.185	\$0.147	\$0.113
(Under) / Over recovery of revenue (A - B + C)	\$4.763	\$3.276	\$1.854	(\$0.071)
TUoS overs/unders account				
Opening balance	\$6.149	\$4.872	\$3.349	\$1.885
Interest on opening balance	\$0.284	\$0.221	\$0.113	\$0.113
(Under)/over for regulatory year	(\$1.527)	(\$1.705)	(\$1.551)	(\$2.012)
Interest on (under)/over for regulatory year	(\$0.035)	(\$0.038)	(\$0.026)	(\$0.059)
Closing balance	\$4.872	\$3.349	\$1.885	(\$0.073)

6.7 Price movements for 2022-23

TasNetworks' network tariff strategy recognises the changing expectations of customers and the upward pressure exerted on energy prices in recent years. TasNetworks' strategy is to achieve predictable and sustainable prices for our customers.

Appendix B.6 compares the charges applying to each network tariff and network tariff parameter.

6.7.1 Price changes individual tariff calculation network tariffs

Individual tariff calculations are included in Appendix B.7 for DUoS charges and Appendix B.8 for the locational TUoS charges.

³¹ NER, Clause 6.18.2(b)(6). Refer to output table 2 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022].xlsx

It is worth noting that the difference in the percentage change is a reflection of the different drivers of each network tariff and represent the transition to more cost reflective pricing as we continue to remove historic cross subsidies.

6.8 Tariff variations

Clause 6.18.2(b) of the NER requires that TasNetworks' Annual Distribution Pricing Proposal sets out the nature of any variation or adjustment to a tariff that could occur during the course of the regulatory year and the basis on which it could occur.

6.8.1 Adjustments to tariffs within a regulatory year

6.8.1.1 Changes to tariffs by network tariff class

Section 2 of our TSS outlines our tariff strategy for the 2019-24 regulatory period, with Table 10 outlining the key tariff reforms we are continuing to implement.

Table 10 – Network tariff reforms

Network tariff reform
Continuing to progressively reduce cross subsidies between customers and between tariffs
Embedding the two new demand based time of use tariff introduced in TasNetworks' 2018-19 Annual Pricing Proposal (with a start date of 1 December 2018) to give households and small businesses who invest in distributed energy resources (DER) new opportunities to control their electricity costs.
Assigning new residential customer, residential customer who change their connection and residential customer whose existing accumulation meter is replaced with an advanced meter to a time of use consumption based network tariff on an opt-out basis.
Offering 'introductory' discounts for our demand based time of use tariffs for both residential and small business customers, to encourage customer uptake of the new tariffs.

6.8.1.2 Individually calculated tariffs

Variations or adjustments to network tariffs will only occur where an ITC customer advises TasNetworks that they intend to alter their demand or connection characteristics during 2022-23. In this case, TasNetworks would recalculate the charging parameters of the tariff.

New network tariffs will also be created for any new ITC customer that may connect during 2022-23, in line with the methodology set out in this Annual Distribution Pricing Proposal.

6.8.2 Network cost movements for small customers

The total network charges of a typical residential customer on the time of use consumption tariff TAS93 are anticipated to increase by approximately 0.5% in 2022-23. Small Business customers are likely to incur increases of around 0.6% to 1.65%, depending on their tariff and level of total annual consumption. Further details can be found in output Table 6 from TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [12-05-2022].xlsb.

7 Alternative Control Services

7.1 What are alternative control services

ACS refers to those services that can be directly attributed to and/or initiated by a particular customer. These services are subject to direct regulatory oversight where the AER caps the prices that can be charged or sets the input costs that can be used by TasNetworks to quote jobs. Services in this category include regulated metering services for small customers, network ancillary services and public lighting. Further information on our ACS can be found in Appendix C, Ancillary Control Services.

ACS denotes a form of pricing control used by the AER which involves the use of price caps, rather than revenue caps, to regulate prices. Services classified as alternative control services are services where the costs – and the associated benefits from the service – can be directly attributed to specific customers.

In its Distribution Determination for TasNetworks the AER has classified the following categories of direct control services as alternative control services, with the form of control for all services being a price cap:

- metering services;
- public lighting services;
- ancillary service – fee based services; and
- ancillary service – quoted services.

7.2 Overview of alternative control service network tariffs

7.2.1 Metering services

Metering services are provided to all customers with Type 5 or Type 6 metering installations and form a component of the charges levied within TasNetworks' network tariffs. These metering charges are additional to those network tariff charges designed for the recovery of standard control services. The charges for metering services include the costs for TasNetworks to read those meters and collect the meter data.

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 differing meter classes. These meter classes are shown in Table 27 in Appendix C.2.

7.2.2 Public lighting services

Public lighting services are those services provided by TasNetworks for:

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

These services include the provision, construction and maintenance of new/emerging lighting technology services.

Public lighting services exclude:

- the alteration and relocation of public lighting assets, which will be provided on a quoted service basis and are, therefore, categorised as an ancillary service – quoted service; and

- the installation of contract lights, which will be provided on a quoted service basis and is, therefore, categorised as an ancillary service – quoted service.

The AER has determined that the provision of public lighting services will be categorised according to the type of light that is provided and whether that light is owned by TasNetworks.

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

These lighting types are shown in Table 28 and Table 29 in Appendix C.2.

It is important to note that the total charge for the provision of public lighting services comprise a charge for the provision of a standard control service and an alternative control service. The conveyance 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 public lighting asset are alternative control services. Only the alternative control service component of public lighting network tariffs is discussed in this section.

The 2022-23 public lighting services network tariffs and charging parameters set out in this Annual Distribution Pricing Proposal are based on the price caps determined by the AER in its Distribution Determination for TasNetworks.

7.2.3 Ancillary service – fee based services

Fee based services are those services provided by TasNetworks where the service is, in general, provided for the benefit of a single customer rather than uniformly supplied to all customers. These services are provided upon request and are typically initiated by way of a service request received from a retailer on behalf of their customer.

Examples of the services TasNetworks provides on a fee basis include, but are not limited to:

- energisation;
- de-energisation;
- re-energisation;
- meter testing;
- supply abolishment – removal of meters and service connection;
- tee-up;
- other miscellaneous services;
- connection establishment charges;
- temporary disconnection/reconnection; and
- basic connection alteration.

These services are largely homogenous in nature, in that the cost inputs involved in providing these services do not involve material variations between customers. Therefore, a fixed fee can be set in advance with reasonable certainty.

These fee based service types are shown in Table 30 in Appendix C.2.

7.2.4 Ancillary service – quoted services

TasNetworks is 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 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 retailer on behalf of a customer. TasNetworks provides a range of services on a quoted basis including, but not limited to the non-standard services set in out in Table 31 in Appendix C.2.

7.2.5 Network tariff variations for alternative control services

Alternative control services will change in price in 2022-23 in accordance with the AER's Distribution Determination for TasNetworks.

7.3 Setting the 2022-23 network tariffs for alternative control services

The ACS network tariffs and charging parameters set out in this Annual Distribution Pricing Proposal are based on the price caps determined by the AER in its Distribution Determination for TasNetworks. For metering services, public lighting services and ancillary service – fee based services TasNetworks' price caps are calculated in accordance with the formula, given by the AER in its Distribution Determination for TasNetworks (Appendix C.1).

7.4 Assignment of customers to network tariffs

Section 4 of our TSS sets out the principles TasNetworks must adhere to in assigning customers to network tariff classes and applies to all direct control services (i.e. both SCS and ACS).

The assignment processes for ACS are discussed in more detail in the following documents that have been submitted to the AER in conjunction with this Annual Distribution Pricing Proposal.

- Metering Services Application and Price Guide 2022-23
- Public Lighting Application and Price Guide 2022-23
- Ancillary Services – Fee Based Services Application and Price Guide 2022-23

7.5 Network tariffs and charges

Network tariff classes for ACS are as set out in our TSS. There were no changes to alternative control services network tariff classes from the previous regulatory year. Table in Appendix C.2 set out the metering, public lighting, and ancillary service – fee based services and ancillary service – quoted service groups of alternative control services.

7.5.1 Metering services

Charges for metering services are split between a capital charge, which recovers the cost of our metering fleet, and a non-capital charge, which covers the cost of reading the meter and collecting the metering data. Advanced meters for residential and small business customers are supplied by the retailer. TasNetworks continues to support legacy Type 6 (accumulation) meters, however the bulk of TasNetworks' existing Type 6 meter fleet will be retired before they reach the end of their useful life.

If a customer's Type 6 meter is replaced with an advanced meter, we will stop charging their retailer the non-capital metering charge.

In 2022-23 metering service prices will increase by 1.9 per cent.

7.5.2 Ancillary service – quoted services

We prepare a customer-specific quotation for these services, which include (but are not limited to) services like:

- removing or relocating our assets;
- providing network services at a higher standard of reliability;
- providing overhead and underground power lines for new subdivisions and property developments; and
- more frequent meter reading.

The AER approves the labour rates that we must apply when preparing a quote (in addition to materials and other costs).

7.6 Tariff variations

Clause 6.18.2(b)(5) of the NER requires that TasNetworks' Annual Distribution Pricing Proposal set out the nature of any variation or adjustment to a tariff that could occur during the course of the regulatory year and the basis on which it could occur.

There have been no changes in 2022-23 to the tariffs applying to ACS. ACS will change in prices in 2022-23, in accordance with the AER's Distribution Determination for TasNetworks.

7.7 Customer price impacts

The price changes between 2021-22 and 2022-23 for alternative control services are provided below:

- Metering service prices have increased/decreased by 4.61%
- Public lighting service prices have increased by 5.26%
- Ancillary services – fee based service prices have increased by 3.94%
- The labour component for ancillary services – quoted services has increased by 3.94%

8 Confidentiality

The AER has published confidentiality guidelines as part of its Better Regulation Program that provide guidance regarding the submission of claims of confidentiality by network service providers. Those Guidelines have been applied when assessing the need to protect the information submitted to the AER in support of this Annual Distribution Pricing Proposal.

TasNetworks considers that the sections within, or attachments to, this Annual Distribution Pricing Proposal which are identified in Attachment 07 contain sensitive information. TasNetworks considers that this information should be protected as confidential, on the basis that it is neither common knowledge nor publically available, that its publication would be detrimental to TasNetworks, and that the detriment to TasNetworks of disclosure would outweigh the public benefits.

Where such confidential information exists within this Annual Distribution Pricing Proposal or any attachment, TasNetworks has redacted those confidential parts and provided a 'public' version of the Annual Distribution Pricing Proposal or the attachment. Where TasNetworks considers that an entire attachment should remain confidential it has not provided a 'public' version.

9 Further information

In addition to this overview of our Annual Distribution Pricing Proposal, each year we publish a number of network pricing schedules to help network users, retailers and interested parties understand the development and application of our network tariffs and connection charges. The following schedules can be found on our website, and explain our services and pricing in more detail:

- Standard control services network tariff approval model 2022-23
- Alternative control services annual pricing model 2022-23

These documents, along with our Annual Pricing Proposal, are available on the TasNetworks website at <https://www.tasnetworks.com.au/poles-and-wires/pricing/our-prices>.

Customers and retailers who have questions about our services or prices are encouraged to contact TasNetworks at:

Regulation Leader

Tasmanian Networks Pty Ltd

PO Box 606

Moonah TAS 7009

Phone 1300 127 777

E-mail: regulation@tasnetworks.com.au

Appendix A Compliance checklist

The development of this Annual Distribution Pricing Proposal is governed by Chapter 6 of the National Electricity Rules. The compliance statement shown below in Table 30 has been prepared with reference to sections 6.18.2 and 6.18.5 of the National Electricity Rules (version 179).

Table 11 – Annual Distribution Pricing Proposal Compliance Checklist

Rule Provision	Rule Requirement	APP section
Part I: Distribution Pricing Rules		
6.18.1	Application of this part	
6.18.1C	Sub-threshold tariffs	
6.18.1C(a)	<p>No later than four months before the start of a regulatory year (other than the first regulatory year of a regulatory control period), a Distribution Network Service Provider may notify the AER, affected retailers and Market Small Generation Aggregators and affected retail customers of a new proposed tariff (a relevant tariff) that is determine otherwise than in accordance with the Distribution Network Service Provider's current tariff statement, if both the following is satisfied:</p> <ol style="list-style-type: none"> (1) The Distribution Network Service Provider's forecast revenue from the relevant tariff during each regulatory year in which the tariff is to apply is not greater than 0.5 per cent of the Distribution Network Services Provider's annual revenue requirement for that regulatory year (the individual threshold); and (2) The Distribution Network Service Providers' forecast revenue from the relevant tariff, as well as from all other relevant tariffs, during each regulatory year in which those tariffs are to apply is no greater than one per cent of the Distribution Network Service Provider's annual revenue requirement for that regulatory year (the cumulative threshold). 	<p>Section 6.5.6</p> <p>Not applicable as no new tariffs are proposed during the 2022-23 regulatory year</p>
6.18.2	Pricing Proposals	
6.18.2(a)	<p>A Distribution Network Service Provider must:</p> <ol style="list-style-type: none"> (1) submit to the AER, as soon as practicable, and in any case within 15 business days, after publication of the distribution determination, a pricing proposal (the initial pricing proposal) for the first regulatory year of the regulatory control period; and (2) submit to the AER, at least 3 months before the commencement of the second and each subsequent regulatory year of the regulatory control period, a further pricing proposal (an annual pricing proposal) for the relevant regulatory year. 	<p>Not applicable, this is the 4th proposal in the regulatory control period.</p> <p>This Annual Distribution Pricing Proposal</p>

Rule Provision	Rule Requirement	APP section
6.18.2(b)	<p>A pricing proposal must:</p> <ol style="list-style-type: none"> (1) [Deleted] (2) set out the proposed tariffs for each tariff class that is specified in the Distribution Network Service Provider's tariff structure statement for the relevant regulatory control period; (3) set out, for each proposed tariff, the charging parameters and the elements of service to which each charging parameter relates; (4) set out, for each tariff class related to standard control services, the expected weighted average revenue for the relevant regulatory year and also for the current regulatory year; (5) set out the nature of any variation or adjustment to the tariff that could occur during the course of the regulatory year and the basis on which it could occur; (6) set out how designated pricing proposal charges are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous regulatory year; <p>(6A) This section relates to jurisdictional schemes.</p> <p>(6B) This section relates to jurisdictional schemes.</p> <ol style="list-style-type: none"> (7) demonstrate compliance with the Rules and any applicable distribution determination, including the Distribution Network Service Provider's tariff structure statement for the relevant regulatory control period; <p>(7A) demonstrate how each proposed tariff is consistent with the corresponding indicative pricing levels for the relevant regulatory year as set out in the relevant indicative pricing schedule, or explain any material differences between them; and</p> <ol style="list-style-type: none"> (8) describe the nature and extent of change from the previous regulatory year and demonstrate that the changes comply with the Rules and any applicable distribution determination. 	<p>Not applicable</p> <p>Appendix B.3 Appendix B.4 Appendix B.5</p> <p>Section 6.3 Appendix B.2</p> <p>Section 6.4.3</p> <p>Section 6.3 Section 6.4 Section 6.8 Section 7.6</p> <p>Section 6.6.3 TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022]</p> <p>There are no jurisdictional schemes applicable to TasNetworks</p> <p>This Annual Distribution Pricing Proposal</p> <p>Section 6.4.6</p> <p>Section 6 Appendix B.6 Appendix B.7 Appendix B.8</p>
6.18.2(c)	The AER must on receipt of a pricing proposal from a Distribution Network Service Provider publish the proposal.	Noted
6.18.2(d)	At the same time as a Distribution Network Service Provider submits a pricing proposal under paragraph (a), the Distribution Network Service Provider must submit to the AER a revised indicative pricing schedule which sets out, for each tariff and for each of the remaining regulatory years of the regulatory control period, the indicative price levels determined in accordance with the Distribution Network Service Provider's tariff structure statement for that	Appendix B.9

Rule Provision	Rule Requirement	APP section
	regulatory control period and updated so as to take into account that pricing proposal.	
6.18.2(e)	Where the Distribution Network Service Provider submits an annual pricing proposal, the revised indicative pricing schedule referred to in paragraph (d) must also set out, for each relevant tariff under clause 6.18.1C, the indicative price levels for that relevant tariff for each of the remaining regulatory years of the regulatory control period, updated so as to take into account that pricing proposal.	Section 6.5.6 Not applicable as no new tariffs are proposed during the 2022-23 regulatory year Not applicable,
6.18.3	Tariff classes	
6.18.3(a)	[Deleted]	Not applicable
6.18.3(b)	Each retail customer for direct control services must be a member of 1 or more tariff classes.	Section 6.2 Appendix B.2 Appendix C.2
6.18.3(c)	Separate tariff classes must be constituted for retail customers to whom standard control services are supplied and retail customers to whom alternative control services are supplied (but a retail customer for both standard control services and alternative control services may be a member of 2 or more tariff classes.	Section 6.2
6.18.3(d)	A tariff class must be constituted with regard to: <ul style="list-style-type: none"> (1) the need to group retail customers together on an economically efficient basis; and (2) The need to avoid unnecessary transaction costs. 	Section 6.2 Section 6.3.6
6.18.4	Principles governing assignment customers to tariff classes	
6.18.4(a)	In formulating provisions of a distribution determination governing the assignment of retail customers to tariff classes or the re-assignment of retail customers from one tariff class to another, the AER must have regard to the following principles: <ul style="list-style-type: none"> (1) retail customers should be assigned to tariff classes on the basis of one or more of the following factors: <ul style="list-style-type: none"> (i) the nature and extent of their usage or intended usage of distribution services; (ii) the nature of their connection to the network; (iii) whether remotely-read interval metering or other similar metering technology has been installed at the retail customer's premises as a result of a regulatory obligation or requirement; (2) retail customers with a similar connection and distribution service usage profile should be treated on an equal basis; (3) [deleted] (4) a Distribution Network Service Provider's decision to assign a customer to a particular tariff class, or to re-assign a customer from one tariff class to another should 	Section 6.3.1 Section 4 of TasNetworks' Tariff Structure Statement TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022]

Rule Provision	Rule Requirement	APP section
	be subject to an effective system of assessment and review.	
6.18.4(b)	If the charging parameters for a particular tariff result in a basis of charge that varies according to the distribution service usage profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.	Not applicable
6.18.5	Pricing Principles	
6.18.5 6.18.5(a)	Network pricing objective The network pricing objective is that the tariffs that a Distribution Network Service Provider charges in respect of its provision of direct control services to a retail customer should reflect the Distribution Network Service Provider's efficient costs of providing those services to the retail customer.	Noted
6.18.5(b)	Application of the pricing principles Subject to paragraph (c), a Distribution Network Service Provider's tariffs must comply with the pricing principles set out in paragraphs (e) to (j).	Section 6.5
6.18.5(c)	A Distribution Network Service Provider's tariffs may vary from tariffs which would result from complying with the pricing principles set out in paragraphs (e) to (g) only: (1) to the extent permitted under paragraph (h); and (2) to the extent necessary to give effect to the pricing principles set out in paragraphs (i) to (j).	Section 6.5
6.18.5(d)	A Distribution Network Service Provider must comply with paragraph (b) in a manner that will contribute to the achievement of the network pricing objective.	Section 6.5
6.18.5(e)	Pricing principles For each tariff class, the revenue expected to be recovered must lie on or between: (1) an upper bound representing the stand alone cost of serving the retail customers who belong to that class; and (2) a lower bound representing the avoidable cost of not serving those retail customers.	Section 6.5.1
6.18.5(f)	Each tariff must be based on the long run marginal cost of providing the service to which it relates to the retail customers assigned to that tariff with the method of calculating such cost and the manner in which that method is applied to be determined having regard to: (1) the costs and benefits associated with calculating, implementing and applying that method as proposed; (2) the additional costs likely to be associated with meeting demand from retail customers that are assigned to that tariff at times of greatest utilisation of the relevant service; and	Section 6.5.2

Rule Provision	Rule Requirement	APP section
	(3) the location of retail customers that are assigned to that tariff and the extent to which costs vary between different locations in the distribution network.	
6.18.5(g)	<p>The revenue expected to be recovered from each tariff must:</p> <ol style="list-style-type: none"> (1) reflect the Distribution Network Service Provider's total efficient costs of serving the retail customers that are assigned to that tariff; (2) when summed with the revenue expected to be received from all other tariffs, permit the Distribution Network Service Provider to recover the expected revenue for the relevant services in accordance with the applicable distribution determination for the Distribution Network Service Provider; and (3) comply with sub-paragraphs (1) and (2) in a way that minimises distortions to the price signals for efficient usage of the relevant service that would result from tariffs that comply with the pricing principle set out in paragraph (f). 	<p>Section 6.1 Section 6.5.3</p>
6.18.5(h)	<p>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:</p> <ol style="list-style-type: none"> (1) the desirability for tariffs to comply with the pricing principles referred to in paragraphs (f) and (g), albeit after a reasonable period of transition (which may extend over more than one regulatory control period); (2) the extent to which retail customers can choose the tariff to which they are assigned; and (3) the extent to which retail customers are able to mitigate the impact of changes in tariffs through their decisions about usage of services. 	<p>Section 6.5</p>
6.18.5(i)	<p>The structure of each tariff must be reasonably capable of:</p> <ol style="list-style-type: none"> (1) being understood by retail customers that are or may be assigned to that tariff (including in relation to how decisions about usage of services or controls may affect the amounts paid by those customers); or (2) being directly or indirectly incorporated by retailers or Market Small Generation Aggregators in contract terms offered to those customers, having regard to information available to the Distribution Network Service Provider, which may include: (3) the type and nature of those retail customers; (4) the information provided to, and the consultation undertaken with, those retail customers; and 	<p>Appendix B.2 Appendix B.3 Appendix B.4 Appendix B.5</p>

Rule Provision	Rule Requirement	APP section
	(5) the information provided by, and consultation undertaken with, retailers and Market Small Generation Aggregators.	
6.18.5(j)	A tariff must comply with the Rules and all applicable regulatory instruments.	Section 6.5.7
6.18.6	Side constraints on tariffs for standard control services	
6.18.6(a)	This clause applies only to tariff classes related to the provision of standard control services.	Noted
6.18.6(b)	The expected weighted average revenue to be raised from a tariff class for a particular regulatory year of a regulatory control period must not exceed the corresponding expected weighted average revenue for the preceding regulatory year in that regulatory control period by more than the permissible percentage.	Section 6.4.3
6.18.6(c)	The permissible percentage is the greater of the following: <ul style="list-style-type: none"> (1) the CPI-X limitation on any increase in the Distribution Network Service Provider's expected weighted average revenue between the two regulatory years plus 2%; <p>Note: The calculation is of the form $(1 + CPI)(1 - X)(1 + 2\%)$</p> (2) CPI plus 2% <p>Note: The calculation is of the form $(1 + CPI)(1 + 2\%)$</p> 	Section 6.4.5
6.18.6(d)	In deciding whether the permissible percentage has been exceeded in a particular regulatory year, the following are to be disregarded: <ul style="list-style-type: none"> (1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13; (2) the recovery of revenue to accommodate pass through of designated pricing proposal charges to retail customers; (3) the recovery of revenue to accommodate pass through of jurisdictional scheme amounts for approved jurisdictional schemes. 	Not applicable Not applicable There are no jurisdictional schemes applicable to TasNetworks
6.18.6(e)	[Deleted]	
6.18.7	Recovery of designated pricing proposal charges	
6.18.7(a)	A pricing proposal must provide for tariffs designed to pass on to retail customers the designated pricing proposal charges to be incurred by the Distribution Network Service Provider.	Section 6.6
6.18.7(b)	The amount to be passed on to retail customers for a particular regulatory year must not exceed the estimated amount of the designated pricing proposal charges adjusted for over or under recovery in accordance with paragraph (c).	Section 6.6

Rule Provision	Rule Requirement	APP section
6.18.7(c)	<p>The over and under recovery amount must be calculated in a way that:</p> <ol style="list-style-type: none"> (1) subject to subparagraphs (2) and (3) below, is consistent with the method determined by the AER in the relevant distribution determination for the Distribution Network Service Provider; (2) ensures a Distribution Network Service Provider is able to recover from retail customers no more and no less than the designated pricing proposal charges it incurs; and (3) adjusts for an appropriate cost of capital that is consistent with the allowed rate of return used in the relevant distribution determination for the relevant regulatory year. 	Section 6.6 TasNetworks - FINAL – 2022-23 Annual SCS pricing model – [31-03-2022]
6.18.7(d)	<p>Notwithstanding anything else in this clause 6.18.7, a Distribution Network Service Provider may not recover charges under this clause to the extent these are:</p> <ol style="list-style-type: none"> (1) recovered through the Distribution Network Service Provider’s annual revenue requirement; (2) recovered under clause 6.18.7A; or (3) recovered from another Distribution Network Service Provider. 	Section 6.6
6.18.7A	Recovery of jurisdictional scheme amounts	
6.18.7A	Section 6.18.7A relates to matters concerning jurisdictional scheme amounts.	There are no jurisdictional schemes applicable to TasNetworks

Appendix B Standard control services

Appendix B.1. Standard control services – formulae

Equation 1 – Revenue cap formula

1	$TAR_t \geq \sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_t^{ij}$	$i = 1, \dots, n \text{ and } j = 1, \dots, m \text{ and } t = 1, 2, \dots, 5$
2	$TAR_t = AAR_t + I_t + B_t + C_t$	$t = 1, 2, \dots, 5$
3	$AAR_t = AR_t \times (1 + S_t)$	$t = 1$
4	$AAR_t = AAR_{t-1} \times (1 + \Delta CPI_t)(1 - X_t)(1 + S_t)$	$t = 2, \dots, 5$

Where:

TAR_t	is the total allowable revenue in year t .
p_t^{ij}	is the price of parameter ' j ' of tariff ' i ' in year t .
q_t^{ij}	is the forecast quantity of parameter ' j ' of tariff ' i ' in year t .
AR_t	is the annual smoothed revenue requirement in the Post Tax Revenue Model (PTRM) for year t .
AAR_t	is the adjusted annual smoothed revenue requirement for the year t .
I_t	is the sum of demand management incentive scheme (DMIA) and innovation allowance adjustment in year t relating to: <ul style="list-style-type: none"> the final carryover amount from the application of the DMIA from the 2017-19 Distribution Determination. approved DMIA amounts for year $t - 2$.
B_t	is the sum of the following adjustment factors for year t and includes the true-up for any under or over recovery of actual revenue collected through DUoS charges (refer Equation 2).
C_t	is the sum of approved cost pass through amounts (positive or negative) with respect to regulatory year t , as determined by the AER. It will also include any end-of-period adjustment in year t .
S_t	is the s-factor for regulatory year t . It will also incorporate any adjustments required due to the application of the service target performance incentive scheme (STPIS).
X_t	is the x-factor for each year of the 2019-24 regulatory control period as determined by the AER in the PTRM and annually revised by the AER.
ΔCPI_t	is the annual percentage change in the Australian Bureau of Statistics (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities from December in year $t - 2$ to December in year $t - 1$. For example, for 2022-23, year $t - 2$ is December quarter 2020 and $t - 1$ is December quarter 2021.

Equation 2 – Under or over recovery of DUoS charges

$$DUoS \text{ under and overs true up}_t = -(Opening \text{ Balance}_t)(1 + WACC_t)^{0.5}$$

Where:

DUoS under and overs true up_t is the true up for the balance of the DUoS unders and overs account in year *t*.

Opening Balance_t is the opening balance of the DUoS unders and overs account in year *t* as calculated by the method in Appendix A of the AER's Distribution Determination for TasNetworks.

WACC_t is the approved weighted average cost of capital used in regulatory year *t* in the DUoS under and overs account in Appendix A of the AER's Distribution Determination for TasNetworks.

- An under or over recovery of the Electrical Safety Inspection Service charge, calculated using the method in Equation 3.

Equation 3 – Electrical safety inspection service charge

$$ESISC_t = (ESISCa_{t-1} - ESISCe_{t-1}) \times (1 + Nominal \text{ vanilla } WACC_t)$$

Where:

ESISCa_{t-1} is the actual Electrical Safety Inspection Service Charge (**ESISC**) for year *t* – 1.

ESISCe_{t-1} is the estimated ESISC for year *t* – 1 as determined by the AER.

Nominal vanilla WACC_t is the approved weighted average cost of capital for the relevant regulatory year using the method in Equation 4.

Equation 4 – Nominal vanilla WACC_t

$$Nominal \text{ vanilla } WACC_t = ((1 + real \text{ vanilla } WACC_t) \times (1 + \Delta CPI_t)) - 1$$

Where the real vanilla WACC_t as set out in our final decision PTRM and updated annually:

- Any under or over recovery of the National Energy Market charge, calculated using the method in Equation 5.

Equation 5 – National Energy Market Charge

$$NEMC_{t-1} = (NEMCa_{t-1} - NEMCe_{t-1}) \times (1 + Nominal \text{ vanilla } WACC_t)$$

Where:

NEMCa_{t-1} is the actual National Energy Market Charge (**NEMC**) for year *t* – 1.

$ESISCe_{t-1}$ is the estimated NEMC for year $t - 1$ as determined by the AER.

$Nominal\ vanilla\ WACC_t$ is the approved weighted average cost of capital for the relevant regulatory year using the method in Equation 4.

Equation 6 – Side constraint formula

$$\frac{\left(\sum_{i=1}^n \sum_{j=1}^m d_t^{ij} q_t^{ij} \right)}{\left(\sum_{i=1}^n \sum_{j=1}^m d_{t-1}^{ij} q_t^{ij} \right)} \leq (1 + \Delta CPI_t) \times (1 - X_t) \times (1 + 2\%) \times (1 + S_t) + I'_t + B'_t + C'_t$$

Where:

d_t^{ij} is the proposed price for parameter 'j' of tariff 'i' for year t .

d_{t-1}^{ij} is the price charged for parameter 'j' of tariff 'i' for year $t - 1$.

q_t^{ij} is the forecast quantity of parameter 'j' of tariff 'i' for year t .

ΔCPI_t is 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_t is the X factor for each year of the 2019-24 regulatory control period as determined in the PTRM and annually revised for the return on debt update. If $X > 0$, the X will be set equal to zero for the purposes of the side constraint formula.

S_t is the S factor for regulatory year t . It will also incorporate any adjustments required due to the application of the STPIS in the 2019-24 regulatory control period consistent with the AER's STPIS.

I'_t is the annual percentage change from the sum of demand management incentive schemes and allowance adjustments in year t relating to:

- the final carryover amount from the application of the old demand management innovation allowance (DMIA/DMIAM) from the 2017-19 Distribution Determination. This amount was incorporated in the allowed revenue in the 2021-22 pricing proposal.
- approved demand management incentive scheme amounts from year $t - 2$.

B'_t is the annual percentage change from the sum of the following annual adjustment factors for year t :

- true-up for any under or over recovery of actual revenue collected through DUoS charges calculated using method
- Equation 2.
- Electrical Safety Inspection Service Charge, calculated using the method in Equation 3.
- Any under or over recovery of the National Energy Market Charge, calculated using the method in Equation 5.

C'_t Is the annual percentage change from the sum of approved cost pass through amount (positive or negative) with respect to the regulatory year t , as determined by the AER.

With the exception of the CPI, X-factor and S-factor, the percentage for each of the other factors above can be calculated by dividing the incremental revenues (as used in the total annual revenue formula) for each factor by the expected revenues for regulatory year $t-1$ (based on the prices in year $t-1$ multiplied by the forecast quantities for year t).

Appendix B.2. Standard control services – application of our network tariffs

This section provides the charging parameters of TasNetworks' network tariffs within their network tariff classes. Further information of the charging parameters for the recovery of DUoS and TUoS can be found in Appendix B.3 and Appendix B.4 respectively.

Table 12 – Application of our residential network tariffs³²

Network tariff	Network tariff description	Charging parameters
TAS93 – Residential low voltage time of use	This is a general use cost reflective consumption network tariff. <i>This is the default network tariff.</i>	Service charge (c/day) Peak consumption charge (c/kWh) Off-peak consumption charge (c/kWh)
TAS31 – Residential low voltage general	This is a general use flat rate consumption network tariff.	Service charge (c/day) Anytime consumption charge (c/kWh)
TAS87 – Residential low voltage time of use demand	This is a cost reflective demand network tariff for residential premises.	Service charge (c/day) Peak demand charge (c/KW/day) Off-peak demand charge (c/KW/day)
TAS97 – Residential low voltage distributed energy resources	This is a cost reflective demand network tariff where electricity storage, generation or electricity management devices – collectively referred to as “distributed energy resources” (DER) – have been deployed behind the meter.	Service charge (c/day) Peak demand charge (c/KW/day) Off-peak demand charge (c/KW/day)
TAS101 – Residential low voltage PAYG <i>This product is obsolete, with no new connections allowed.</i>	This network tariff supports Aurora Energy's Pay As You Go (PAYG) product and is not to be used for any other application. This network tariff is for customers that have a specialised PAYG meter installed for the provision of the PAYG product.	Service charge (c/day) Anytime consumption charge (c/kWh)
TAS92 – Residential low voltage PAYG time of use <i>This product is obsolete, with no new connections allowed.</i>	This network tariff supports Aurora Energy's Pay As You Go (PAYG) product and is not to be used for any other application. This network tariff is for customers with a basic meter and Payguard meter configured for the provision of the PAYG product.	Service charge (c/day) Peak consumption charge (c/kWh) Off-peak consumption charge (c/kWh)

³² All residential network tariffs are for low voltage installations that are for premises that are wholly or principally used as a private residential dwelling.

Table 13 – Application of our small business low voltage network tariffs³³

Network tariff	Network tariff description	Charging parameters
TAS94 – Small business low voltage time of use	This is a general use cost reflective consumption network tariff. <i>This is the default network tariff.</i>	Service charge (c/day) Peak consumption charge (c/kWh) Shoulder consumption charge (c/kWh) Off-peak consumption charge (c/kWh)
TAS22 – Small business low voltage general	This is a general use flat rate consumption network tariff.	Service charge (c/day) Anytime consumption charge (c/kWh)
TAS88 – Small business low voltage time of use demand	This is a cost reflective demand network tariff is for low voltage installations that are not private residential dwellings.	Service charge (c/day) Peak demand charge (c/KW/day) Off-peak demand charge (c/KW/day)
TAS98 – Residential low voltage distributed energy resources	This is a cost reflective demand network tariff where electricity storage, generation or electricity management devices – collectively referred to as “distributed energy resources” (DER) – have been deployed behind the meter.	Service charge (c/day) Peak demand charge (c/KW/day) Off-peak demand charge (c/KW/day)

Table 14 – Application of our large business low voltage network tariffs

Network tariff	Network tariff description	Charging parameters
TAS82 – Large business low voltage kVA demand	This demand-based network tariff is for installations taking low voltage multi-phase supply that are not private residential dwellings.	Service charge (c/day) Anytime consumption charge (c/kWh) Anytime maximum demand charge (c/kVA/day)
TAS89 – Large business low voltage time of use demand	This time of use demand network tariff is for installations that are taking low voltage multi-phase supply that are not private residential dwellings.	Service charge (c/day) Peak demand charge (c/kVA/day) Off-peak demand charge (c/kVA/day)

Table 15 – Application of our irrigation network tariffs

Network tariff	Network tariff description	Charging parameters
TAS75 – Irrigation low voltage time of use consumption	This low voltage cost reflective consumption network tariff is for primary producer’s business installations that are used solely for the irrigation of crops, which must be classified as ANZSIC class 01.	Service charge (c/day) Peak consumption charge (c/kWh) Shoulder consumption charge (c/kWh) Off-peak consumption charge (c/kWh)

³³ All small business network tariffs in this section are for low voltage installations for premises that are not private residential dwelling

Table 16 – Application of our large business high voltage network tariffs

Network tariff	Network tariff description	Charging parameters
TASSDM – Business high voltage kVA specified demand (<2MVA)	<p>This network tariff is for customers where:</p> <ul style="list-style-type: none"> connection is made to their site at high voltage; and the expected any-time maximum demand (ATMD) is less than 2MVA. <p>Customers on this network tariff are able to agree with TasNetworks on a “Specified Demand” for their electrical installation. Once agreed this value will be applied to the following period of not less than 12 months.</p> <p>A site connected to the TasNetworks distribution network with this network tariff is not eligible for any other network tariff</p>	Service charge (c/day)
		Peak consumption charge (c/kWh)
		Shoulder consumption charge (c/kWh)
		Off-peak consumption charge (c/kWh)
		Specified demand charge (c/kVA/day)
	Excess demand charge (c/kVA/day)	
TAS15 – Business high voltage kVA specified demand (>2MVA)	<p>This network tariff is for customers where:</p> <ul style="list-style-type: none"> connection is made to their site at high voltage; and the expected any-time maximum demand (ATMD) is greater than 2MVA. <p>Customers on this network tariff are able to agree with TasNetworks on a “Specified Demand” for their electrical installation to be use in the calculation of NUoS charges. Once agreed this value will be applied to the following period of not less than 12 months.</p> <p>A site connected to the TasNetworks distribution network with this network tariff is not eligible for any other network tariff.</p>	Service charge (c/day)
		Peak consumption charge (c/kWh)
		Shoulder consumption charge (c/kWh)
		Off-peak consumption charge (c/kWh)
		Specified demand charge (c/kVA/day)
	Excess demand charge (c/kVA/day)	

Table 17 – Application of our individual tariff calculation network tariffs

Network tariff	Network tariff description	Charging parameters
Individual tariff calculation (TASCUS1) (TASCUS2) (TASCUS3) (TASCUS4)	<p>Individual Tariff Calculation (ITC) 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 identify the average shared network charge to be meaningless or distorted. ITC network tariffs are determined by modelling the connection point requirements as requested by the customer or their agent.</p> <p>ITC prices are based on the TUoS charges applying to the nearest relevant transmission connection point, plus the charges associated with the shared distribution network utilised for the customer’s electricity supply, as well as connection charges based on the connection assets utilised to supply the customer. This provides the greatest cost reflectivity for this type of customer and is feasible since the number of such customers is small.</p>	Terms and conditions for these customers are contained within individually negotiated connection agreements.

Table 18 – Application of our uncontrolled energy network tariffs

Network tariff	Network tariff description	Charging parameters
TAS41 – Uncontrolled energy low voltage heating	This network tariff is for low voltage installations. In installations that are private residential dwellings , this network tariff can only be applied to water heating and/or space heating loads, and/or domestic indoor pool heating.	Service charge (c/day)
	In installations that are not private residential dwellings , this network tariff is for water heating only.	Anytime consumption charge (c/kWh)

Table 19 – Application of our controlled energy network tariffs

Network tariff	Network tariff description	Charging parameters
TAS63 – Controlled energy off-peak [night only]	This network tariff is for low voltage installations and is only available during off-peak periods. For installations that are private residential dwellings , this network tariff may be applied to:	Service charge (c/day)
	<ul style="list-style-type: none"> water heating and/or space heating and/or other circuits as approved by TasNetworks; and may be used for heating swimming pools, including those that incorporate a spa. Note that a spa from which the water goes to waste after use may not be connected on this network tariff. <p>In the case of installations that are not private residential dwellings, this network tariff may only be applied to:</p> <ul style="list-style-type: none"> water heating and/or space heating, and/or other circuits as approved by TasNetworks 	Anytime consumption charge (c/kWh)
TAS61 – Controlled energy off-peak with afternoon boost <i>This product is obsolete, with no new connections allowed.</i>	This off-peak network tariff is for low voltage installations and includes an ‘afternoon boost’ parameter. For installations that are private residential dwellings , this network tariff may be applied to:	Service charge (c/day)
	<ul style="list-style-type: none"> water heating and/or space heating and/or other “wired in” appliances as approved by TasNetworks; and may be used for heating swimming pools, including those that incorporate a spa. Note that a spa from which the water goes to waste after use may not be connected on this network tariff. <p>In the case of installations that are not private residential dwellings, this network tariff may only be applied to:</p> <ul style="list-style-type: none"> water heating and/or space heating, and/or other “wired in” appliances as approved by TasNetworks 	Anytime consumption charge (c/kWh)

Table 20 – Application of our unmetered supply network tariffs

Network tariff	Network tariff description	Charging parameters
TASUMS – Low voltage unmetered supply general	<p>This network tariff is for small, low voltage, low demand installations with a relatively constant load profile. For example:</p> <ul style="list-style-type: none"> • illuminated street signs; • public telephone kiosks; • electric fences; • two-way radio transmitters; • fixed steady wattage installations; • traffic lights; and • level crossings. <p>All installations on this network tariff must have all components permanently connected. For the avoidance of doubt, an installation containing a power point does qualify for this network tariff.</p>	<p>Service charge (c/day)</p> <hr/> <p>Anytime consumption charge (c/kWh)</p>
TASUMSSL – Low voltage unmetered supply public lighting	<p>This network tariff is for customers that have a lighting service provided by TasNetworks.</p> <p>This network tariff does not cover the installations and/or replacement of lamps, which are charged separately.</p>	<p>Demand charge (c/lamp watt/day)</p>

Appendix B.3. Standard control services – 2022-23 network tariff schedule – NUoS

Table 21 – Standard control services – 2022-23 network tariff schedule – NUoS

Network tariff description	Network tariff code	Fixed charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/ connection charges c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Residential											
Residential time of use consumption	TAS93	59.329		14.588		2.917					
Residential general light and power	TAS31	54.269	7.931								
Residential time of use demand	TAS87	60.367					25.309	6.742			
Residential time of use demand DER	TAS97	60.367					25.309	6.742			
<i>Residential pay as you go</i>	<i>TAS101³⁴</i>	<i>54.712</i>	<i>7.292</i>								
<i>Residential pay as you go time of use</i>	<i>TAS92³⁴</i>	<i>59.329</i>		<i>14.588</i>		<i>2.917</i>					
Small business low voltage											
Small business time of use consumption	TAS94	70.976		10.210	6.126	1.532					
Small business general light and power	TAS22	53.960	9.072								
Small business time of use demand	TAS88	78.500					57.344	15.277			
Small business time of use demand DER	TAS98	78.500					57.344	15.277			
Large business low voltage											
Large business kVA demand	TAS82	362.531	2.324				33.279				
Large business time of use demand	TAS89	510.705					43.644	14.534			
Irrigation											
Irrigation time of use	TAS75 ³⁵	259.733		10.124	6.074	1.519					

³⁴ This network tariff is obsolete, and no new connections are allowed.

³⁵ This tariff has seasonality parameters for peak, shoulder and off-peak parameters.

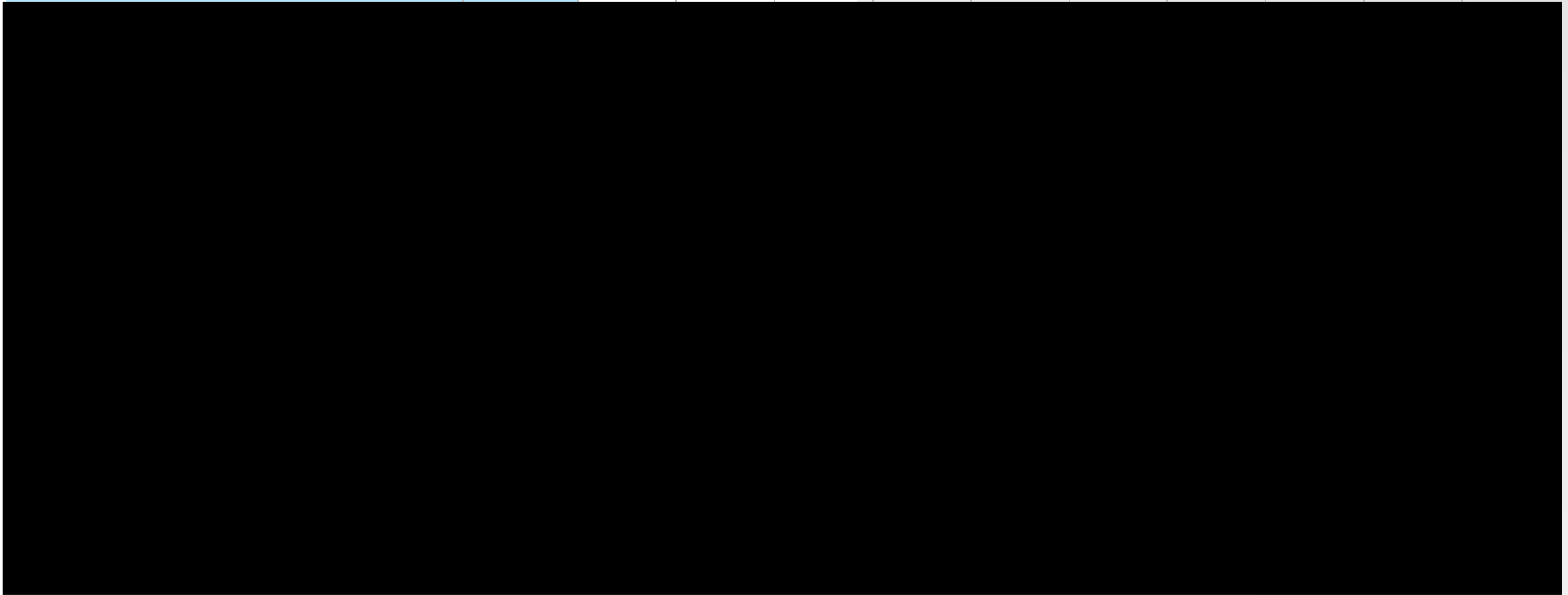
Network tariff description	Network tariff code	Fixed charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/ connection charges c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Large business high voltage											
Business HV kVA specified demand <2MVA	TASSDM	366.033		1.173	0.704	0.176				19.108/ 0	191.080/ 0
Business HV kVA specified demand >2MVA	TAS15 ³⁶	3,004.700		0.928	0.557	0.139				9.213/ 0.335	46.065/ 1.675
Uncontrolled Energy											
Uncontrolled heating and hot water	TAS41	6.706	5.822								
Controlled Energy											
Controlled low voltage night period only	TAS63	12.777	1.345								
<i>Controlled low voltage off-peak with afternoon boost</i>	<i>TAS61³⁷</i>	<i>12.777</i>	<i>1.558</i>								
Unmetered Supply											
Unmetered supply general	TASUMS	53.960	10.637								
Street Lighting											
Street Lighting	TASUMSSL ³⁸						0.110				

³⁶ DUoS component only, locational TUoS component also applies.

³⁷ This network tariff is obsolete, and no new connections are allowed.

³⁸ Public lighting is charged on the basis of c/lamp watt/day

Network tariff description	Network tariff code	Fixed charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/ connection charges c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Individual Tariff Calculation											



Appendix B.4. Standard control services – 2022-23 network tariff schedule – DUoS

Table 22 – Standard control services – 2022-23 network tariff schedule - DUoS

Network tariff description	Network tariff code	Service charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/ connection charges c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Residential											
Residential time of use consumption	TAS93	59.329		10.872		2.174					
Residential general light and power	TAS31	54.269	5.967								
Residential time of use demand	TAS87	60.367					20.152	5.368			
Residential time of use demand DER	TAS97	60.367					20.152	5.368			
<i>Residential pay as you go</i>	<i>TAS101³⁹</i>	<i>54.712</i>	<i>5.889</i>								
<i>Residential pay as you go time of use</i>	<i>TAS92³⁹</i>	<i>59.329</i>		<i>10.872</i>		<i>2.174</i>					
Small business low voltage											
Small business time of use consumption	TAS94	70.976		7.871	4.723	1.181					
Small business general light and power	TAS22	53.960	7.108								
Small business time of use demand	TAS88	78.500					45.754	12.189			
Small business time of use demand DER	TAS98	78.500					45.754	12.189			
Large business low voltage											
Large business kVA demand	TAS82	362.531	1.748				20.865				
Large business time of use demand	TAS89	510.705						26.035	8.670		
Irrigation											
Irrigation time of use	TAS75 ⁴⁰	259.733		7.370	4.422	1.106					

³⁹ This network tariff is obsolete, and no new connections are allowed.

⁴⁰ This tariff has seasonality parameters for peak, shoulder and off-peak parameters.

Network tariff description	Network tariff code	Service charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/ connection charges c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Large business high voltage											
Business HV kVA specified demand <2MVA	TASSDM	366.033		0.303	0.182	0.045				15.812/0	158.120/0
Business HV kVA specified demand >2MVA	TAS15	3,004.700		0.928	0.557	0.139				9.213/0.335	46.065/1.675
Uncontrolled Energy											
Uncontrolled heating and hot water	TAS41	6.706	3.858								
Controlled Energy											
Controlled low voltage night period only	TAS63	12.777	0.906								
<i>Controlled low voltage off-peak with afternoon boost</i>	<i>TAS61⁴¹</i>	<i>12.777</i>	<i>1.008</i>								
Unmetered Supply											
Unmetered supply general	TASUMS	53.960	7.874								
Street Lighting											
Street Lighting	TASUMSSL ⁴²						0.084				

⁴¹ This network tariff is obsolete, and no new connections are allowed.

⁴² Public lighting is charged on the basis of c/lamp watt/day

Network tariff description	Network tariff code	Service charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/ connection charges c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Individual Tariff Calculation											

Appendix B.5. Standard control services – 2022-23 network tariff schedule – TUoS

Table 23 – Standard control services – 2022-23 network tariff schedule - TUoS

Network tariff description	Network tariff code	Service charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/connection charges ⁴³ c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Residential											
Residential time of use consumption	TAS93			3.716		0.743					
Residential general light and power	TAS31		1.964								
Residential time of use demand	TAS87						5.157	1.374			
Residential time of use demand DER	TAS97						5.157	1.374			
<i>Residential pay as you go</i>	<i>TAS101⁴⁴</i>		1.403								
<i>Residential pay as you go time of use</i>	<i>TAS92⁴⁴</i>			3.716		0.743					
Small business low voltage											
Small business time of use consumption	TAS94			2.339	1.403	0.351					
Small business general light and power	TAS22		1.964								
Small business time of use demand	TAS88						11.590	3.088			
Small business time of use demand DER	TAS98						11.590	3.088			
Large business low voltage											
Large business kVA demand	TAS82		0.576				12.414				
Large business time of use demand	TAS89						17.609	5.864			
Irrigation											
Irrigation time of use	TAS75 ⁴⁵			2.754	1.652	0.413					

⁴³ There are no connection charges for the TUoS tariff component

⁴⁴ This network tariff is obsolete, and no new connections are allowed.

⁴⁵ This tariff has seasonality parameters for peak, shoulder and off-peak parameters.

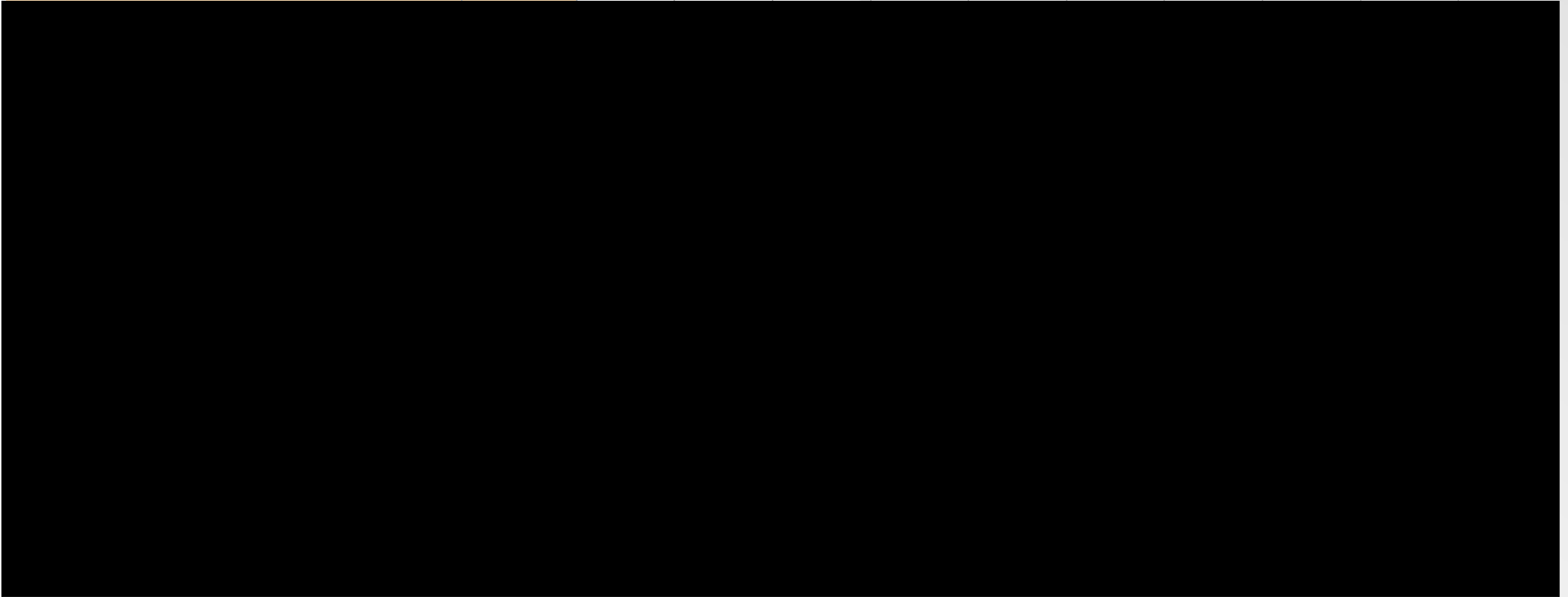
Network tariff description	Network tariff code	Service charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/connection charges ⁴³ c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Large business high voltage											
Business HV kVA specified demand <2MVA	TASSDM			0.870	0.522	0.131				3.296/ 0	32.960/ 0
Business HV kVA specified demand >2MVA	TAS15 ⁴⁶										
Uncontrolled Energy											
Uncontrolled heating and hot water	TAS41		1.964								
Controlled Energy											
Controlled low voltage night period only	TAS63		0.439								
<i>Controlled low voltage off-peak with afternoon boost</i>	<i>TAS61⁴⁷</i>		<i>0.550</i>								
Unmetered Supply											
Unmetered supply general	TASUMS		2.763								
Street Lighting											
Street Lighting	TASUMSSL ⁴⁸						0.026				

⁴⁶ Locational TUoS apply.

⁴⁷ This network tariff is obsolete, and no new connections are allowed.

⁴⁸ Public lighting is charged on the basis of c/lamp watt/day

Network tariff description	Network tariff code	Service charge c/day	Energy charges c/kWh				Demand rates c/kVA, kW, lamp watt/day			Capacity/connection charges ⁴³ c/kVA/day	
			Anytime	Peak	Shoulder	Off-peak	Anytime	Peak	Off-peak	Specified	Excess
Individual Tariff Calculation											



Appendix B.6. Standard control services – 2022-23 proposed network tariff movements

Table 24 - Standard control services – 2022-23 proposed network tariff movements

		2021-22	2022-23	Change
Low voltage residential network tariffs				
Time of use consumption tariff (TAS93)				
Service charge	c/day	57.601	59.329	3.0%
Peak energy charge (weekdays 7am-10am, 4pm-9pm)	c/kWh	14.807	14.588	-1.5%
Off peak energy charge (all other times, including all weekend)	c/kWh	2.887	2.917	1.0%
General power and lighting (TAS31)				
Service charge	c/day	52.688	54.269	3.0%
Energy charge	c/kWh	8.392	7.931	-5.5%
Time of use demand (TAS87)				
Service charge	c/day	58.609	60.367	3.0%
Peak demand charge	c/kW/day	25.601	25.309	-1.1%
Off peak demand charge	c/kW/day	5.967	6.742	13.0%
Time of use demand distributed energy resources (TAS97)				
Service charge	c/day	58.609	60.367	3.0%
Peak demand charge	c/kW/day	25.601	25.309	-1.1%
Off peak demand charge	c/kW/day	5.967	6.742	13.0%
Residential low voltage PAYG (TAS101)				
Service charge	c/day	53.118	54.712	3.0%
Energy charge	c/kWh	7.302	7.292	-0.1%
Residential low voltage PAYG time of use (TAS92)				
Service charge	c/day	57.601	59.329	3.0%
Peak energy charge (weekdays 7am-10am, 4pm-9pm)	c/kWh	14.807	14.588	-1.5%
Off peak energy charge (all other times, including all weekend)	c/kWh	2.887	2.917	1.0%
Business time of use consumption tariff (TAS94)				
Service charge	c/day	68.909	70.976	3.0%
Peak energy charge (weekdays 7am-10pm)	c/kWh	10.055	10.210	1.5%
Shoulder energy (weekend days 7am-10pm)	c/kWh	6.034	6.126	1.5%
Off peak energy charge (all other times)	c/kWh	1.508	1.532	1.6%
Business low voltage general (TAS22)				
Service charge	c/day	52.388	53.960	3.0%
Energy charge	c/kWh	9.080	9.072	-0.1%

		2021-22	2022-23	Change
Business time of use demand (TAS88)				
Service charge	c/day	76.214	78.500	3.0%
Peak demand charge	c/kW/day	56.702	57.344	1.1%
Off peak demand charge	c/kW/day	13.218	15.277	15.6%
Business time of use demand distributed energy resources (TAS98)				
Service charge	c/day	76.214	78.500	3.0%
Peak demand charge	c/kW/day	56.702	57.344	1.1%
Off peak demand charge	c/kW/day	13.218	15.277	15.6%
Low voltage large business network tariffs				
Large business kVA demand (TAS82)				
Service charge	c/day	346.920	362.531	4.5%
Energy charge	c/kWh	2.326	2.324	-0.1%
Demand charge	c/kVA/day	32.518	33.279	2.3%
Large business time of use demand (TAS89)				
Service charge	c/day	488.713	510.705	4.5%
Peak demand charge (weekdays 7am-10am, 4pm-9pm)	c/kVA/day	43.154	43.644	1.1%
Off peak demand charge (all other times, including all weekend)	c/kVA/day	14.370	14.534	1.1%
Low voltage irrigation network tariff				
Irrigation LV time of use tariff (TAS75)				
Service charge	c/day	252.168	259.733	3.0%
Peak energy charge	c/kWh	9.897	10.124	2.3%
Off peak energy charge	c/kWh	5.941	6.074	2.2%
Shoulder energy charge	c/kWh	1.484	1.519	2.4%
High voltage large business network tariffs				
Business HV KVA (<2MVA) specified demand tariff (TASSDM)				
Service charge	c/day	350.271	366.033	4.5%
Peak energy charge	c/kWh	1.138	1.173	3.1%
Shoulder energy charge	c/kWh	0.683	0.704	3.1%
Off peak energy charge	c/kWh	0.170	0.176	3.5%
Specified demand charge	c/kVA/day	18.958	19.108	0.8%
Excess demand charge	c/kVA/day	189.591	191.080	0.8%
Business HV KVA (>2MVA) specified demand tariff (TAS15)⁴⁹				
Service charge	c/day	2,875.300	3,004.700	4.5%
Peak energy charge	c/kWh	0.947	0.928	-2.0%

⁴⁹ DUoS charges only. The TUoS charges are per the nodal charge

		2021-22	2022-23	Change
Shoulder energy charge	c/kWh	0.568	0.557	-1.9%
Off peak energy charge	c/kWh	0.142	0.139	-2.1%
Specified demand charge	c/kVA/day	9.255	9.213	-0.5%
Excess demand charge	c/kVA/day	46.275	46.065	-0.5%
Connection specified demand charge	c/kVA/day	0.337	0.335	-0.6%
Excess connection specified demand charge	c/kVA/day	1.682	1.675	-0.4%
Low voltage uncontrolled energy network tariff				
Uncontrolled heating and hot water tariff (TAS41)				
Service charge	c/day	6.511	6.706	3.0%
Energy charge	c/kWh	5.522	5.822	5.4%
Low voltage controlled energy network tariff				
Controlled low voltage night period only (TAS63)				
Service charge	c/day	12.405	12.777	3.0%
Energy charge	c/kWh	1.335	1.345	0.7%
Controlled low voltage off peak with afternoon boost (TAS61)				
Service charge	c/day	12.405	12.777	3.0%
Energy charge	c/kWh	1.543	1.558	1.0%
Unmetered supplies				
Unmetered supplies (TASUMS)				
Service charge	c/day	52.388	53.960	3.0%
Energy charge	c/kWh	10.601	10.637	0.3%
Street lighting (TASUMSSL)				
Demand charge	c/lamp watt/day	0.107	0.110	2.8%

Appendix B.7. Standard control services – 2022-23 proposed ITC tariff movements

Table 25 - Standard control services - proposed ITC movements for 2022-23 (DUoS only)

NMI	Network tariff code	Units	Charge 2021-22	Charge 2022-23	Change (%)
[Redacted content]					

NMI	Network tariff code	Units	Charge 2021-22	Charge 2022-23	Change (%)

Appendix B.8. Standard control services – 2022-23 locational TUoS movements

Table 26 details all TasNetworks transmission node locations TUoS charges for the 2021-22 and 2022-23 years with a percentage change figure for reference.

Table 26 – Locational TUoS charges

Transmission node description	Transmission node identifier	TUoS charge 2021-22 (c/KVA/day)	TUoS charge 2022-23 (c/KVA/day)	% change
Arthurs Lake	TAL2	20.193	17.519	-13.2%
Avoca	TAV2	12.280	16.570	34.9%
Burnie	TBU3	12.954	13.494	4.2%
Bridgewater	TBW2	14.101	15.032	6.6%
Derwent Bridge	TDB2	150.142	157.646	5.0%
Derby	TDE2	29.700	32.400	9.1%
Devonport	TDP2	14.987	15.561	3.8%
Emu Bay	TEB2	14.549	20.380	40.1%
Electrona	TEL2	18.443	19.790	7.3%
Huon River	THR2	67.287	119.746	78.0%
Kermandie	TKE2	24.706	28.000	13.3%
Kingston 11kV	TKI2	15.365	16.914	10.1%
Kingston 33kV	TKI3	18.357	19.501	6.2%
Knights Road	TKR2	19.249	19.916	3.5%
Meadowbank	TMB2	14.526	13.987	-3.7%
New Norfolk	TNN2	15.782	14.877	-5.7%
Newton	TNT2	34.769	36.900	6.1%
Port Latta	TPS2	17.353	17.205	-0.9%
Palmerston	TPM3	16.757	15.043	-10.2%
Queenstown	TQT2	24.992	25.964	3.9%
Railton	TRA2	14.443	14.869	3.0%
Roseberry	TRB2	13.751	16.917	23.0%
Scottsdale	TSD2	30.821	32.220	4.5%
Sheffield	TSH3	-	6.367	-
St Marys	TSM2	22.497	22.251	-1.1%
Sorell	TSO2	17.635	18.119	2.7%
Savage River	TSR2	15.695	16.153	2.9%
Smithton	TST2	19.216	20.031	4.2%
Triabunna	TTB2	28.136	26.168	-7.0%

Transmission node description	Transmission node identifier	TUoS charge 2021-22 (c/KVA/day)	TUoS charge 2022-23 (c/KVA/day)	% change
Tungatinah	TTU2	50.857	63.490	24.8%
Ulverstone	TUL2	12.679	12.731	0.4%
Waddamana	TWA2	22.955	26.849	17.0%
Wesley Vale	TWV2	14.136	16.005	13.2%
Hobart Virtual	TVN1	14.162	15.045	6.2%
Tamar Virtual	TVN2	12.292	12.726	3.5%

Appendix B.9. Standard control services – Indicative pricing schedule

Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS
Residential																
Time of use consumption	TAS93															
Service charge (c/day)		55.923	-	55.923	55.923	-	55.923	57.601	-	57.601	59.329	-	59.329	61.109	-	61.109
Peak energy (c/kWh)		11.684	4.180	15.864	10.753	3.811	14.564	11.290	3.517	14.807	10.872	3.716	14.588	11.363	3.935	15.298
Off-peak energy (c/kWh)		2.162	0.774	2.936	2.044	0.725	2.767	2.202	0.685	2.887	2.174	0.743	2.917	2.329	0.807	3.136
General light and power	TAS31															
Service charge (c/day)		51.153	-	51.153	51.153	-	51.153	52.688	-	52.688	54.269	-	54.269	55.897	-	55.897
All energy (c/kWh)		6.954	2.213	9.167	6.184	2.017	8.201	6.532	1.860	8.392	5.967	1.964	7.931	6.108	2.081	8.189
Time of use demand	TAS87															
Service charge (c/day)		56.902	-	56.902	56.902	-	56.902	58.609	-	58.609	60.367	-	60.367	62.178	-	62.178
Peak demand (c/kW/day)		21.728	5.793	27.521	19.772	5.284	25.056	20.722	4.879	25.601	20.152	5.157	25.309	21.240	5.462	26.702
Off-peak demand (c/kW/day)		3.460	0.909	4.369	3.950	1.056	5.006	4.830	1.137	5.967	5.368	1.374	6.742	6.366	1.637	8.003
Time of use demand DER	TAS97															
Service charge (c/day)		56.902	-	56.902	56.902	-	56.902	58.609	-	58.609	60.367	-	60.367	62.178	-	62.178
Peak demand (c/kW/day)		21.728	5.793	27.521	19.772	5.284	25.056	20.722	4.879	25.601	20.152	5.157	25.309	21.240	5.462	26.702
Off-peak demand (c/kW/day)		3.460	0.909	4.369	3.950	1.056	5.006	4.830	1.137	5.967	5.368	1.374	6.742	6.366	1.637	8.003

Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS
Residential pay as you go	TAS101⁵⁰															
Service charge (c/day)		51.571	-	51.571	51.571	-	51.571	53.118	-	53.118	54.712	-	54.712	56.353	-	56.353
All energy (c/kWh)		6.033	1.569	7.602	5.673	1.435	7.108	5.976	1.326	7.302	5.889	1.403	7.292	6.219	1.491	7.710
Residential pay as you go ToU	TAS92⁵¹															
Service charge (c/day)		55.923	-	55.923	55.923	-	55.923	57.601	-	57.601	59.329	-	59.329	61.109	-	61.109
Peak energy (c/kWh)		11.684	4.180	15.864	10.753	3.811	14.564	11.290	3.517	14.807	10.872	3.716	14.588	11.363	3.935	15.298
Off-peak energy (c/kWh)		2.162	0.774	2.936	2.044	0.725	2.769	2.202	0.685	2.887	2.174	0.743	2.917	2.329	0.807	3.136
Small business low voltage																
Time of use consumption	TAS94															
Service charge (c/day)		66.902	-	66.902	66.902	-	66.902	68.909	-	68.909	70.976	-	70.976	73.105	-	73.105
Peak energy (c/kWh)		7.489	2.632	10.121	7.209	2.398	9.607	7.844	2.211	10.055	7.871	2.339	10.210	8.572	2.479	11.051
Shoulder energy (c/kWh)		4.494	1.579	6.073	4.325	1.440	5.765	4.707	1.327	6.034	4.723	1.403	6.126	5.143	1.487	6.630
Off-peak energy (c/kWh)		1.123	0.395	1.518	1.082	0.360	1.442	1.176	0.332	1.508	1.181	0.351	1.532	1.286	0.372	1.658
General light and power	TAS22															
Service charge (c/day)		50.862	-	50.862	50.862	-	50.862	52.388	-	52.388	53.960	-	53.960	55.579	-	55.579
All energy (c/kWh)		7.230	2.213	9.443	6.844	2.017	8.861	7.220	1.860	9.080	7.108	1.964	9.072	7.453	2.081	9.534
Time of use demand	TAS88															
Service charge (c/day)		73.994	-	73.994	73.994	-	73.994	76.214	-	76.214	78.500	-	78.500	80.855	-	80.855
Peak demand (c/kW/day)		44.768	13.036	57.804	43.134	11.879	55.013	45.745	10.957	56.702	45.754	11.590	57.344	48.060	12.277	60.337
Off-peak demand (c/kW/day)		7.275	2.044	9.319	8.618	2.374	10.992	10.664	2.554	13.218	12.189	3.088	15.277	14.404	3.679	18.083

⁵⁰ This network tariff is obsolete, and no new connections are allowed.

⁵¹ This network tariff is obsolete, and no new connections are allowed.

Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS
Time of use demand DER	TAS98															
Service charge (c/day)		73.994	-	73.994	73.994	-	73.994	76.214	-	76.214	78.500	-	78.500	80.855	-	80.855
Peak demand (c/kW/day)		44.768	13.036	57.804	43.134	11.879	55.013	45.745	10.957	56.702	45.754	11.590	57.344	48.060	12.277	60.337
Off-peak demand (c/kW/day)		7.275	2.044	9.319	8.618	2.374	10.992	10.664	2.554	13.218	12.189	3.088	15.277	14.404	3.679	18.083
Large business low voltage																
kVA demand	TAS82															
Service charge (c/day)		331.981	-	331.981	331.981	-	331.981	346.920	-	346.920	362.531	-	362.531	378.845	-	378.845
All energy (c/kWh)		1.728	0.634	2.362	1.656	0.587	2.243	1.783	0.543	2.326	1.748	0.576	2.324	1.830	0.611	2.441
All demand (c/kVA/day)		19.489	13.253	32.742	19.071	12.341	31.412	20.959	11.559	32.518	20.865	12.414	33.279	22.159	13.340	35.499
Time of use demand	TAS89															
Service charge (c/day)		467.668	-	467.668	467.668	-	467.668	488.713	-	488.713	510.705	-	510.705	533.687	-	533.687
Peak demand (c/kVA/day)		25.467	18.300	43.767	24.916	16.704	41.620	26.579	16.575	43.154	26.035	17.609	43.644	27.562	18.780	46.342
Off-peak demand (c/kVA/day)		8.481	6.093	14.574	8.296	5.562	13.858	8.851	5.519	14.370	8.670	5.864	14.534	9.178	6.254	15.432
Irrigation																
Irrigation time of use	TAS75⁵²															
Service charge (c/day)		244.823	-	244.823	244.823	-	244.823	252.168	-	252.168	259.733	-	259.733	267.525	-	267.525
Peak energy (c/kWh)		6.748	3.036	9.784	6.516	2.797	9.313	7.293	2.604	9.897	7.370	2.754	10.124	8.306	2.931	11.237
Shoulder energy (c/kWh)		4.049	1.819	5.868	3.910	1.679	5.589	4.377	1.564	5.941	4.422	1.652	6.074	4.984	1.759	6.743
Off-peak energy (c/kWh)		1.012	0.455	1.467	0.978	0.418	1.396	1.094	0.390	1.484	1.106	0.413	1.519	1.246	0.440	1.686

⁵² This tariff has seasonality parameters for peak, shoulder and off-peak parameters.

Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS
Large business high voltage																
HV kVA specified demand <2MVA	TASSDM															
Service charge (c/day)		335.188	-	335.188	335.188	-	335.188	350.271	-	350.271	366.033	-	366.033	382.504	-	382.504
Peak energy (c/kWh)		0.305	0.965	1.270	0.292	0.876	1.168	0.309	0.829	1.138	0.303	0.870	1.173	0.315	0.919	1.234
Shoulder energy (c/kWh)		0.183	0.578	0.761	0.175	0.526	0.701	0.185	0.498	0.683	0.182	0.522	0.704	0.189	0.551	0.740
Off-peak energy (c/kWh)		0.045	0.145	0.190	0.044	0.131	0.175	0.046	0.124	0.170	0.045	0.131	0.176	0.047	0.138	0.185
Specified daily demand (c/kVA/day)		15.087	3.456	18.543	14.768	3.189	17.957	15.891	3.067	18.958	15.812	3.296	19.108	16.682	3.571	20.253
Excess daily demand (c/kVA/day)		150.875	34.574	185.449	147.679	31.898	179.577	158.921	30.670	189.591	158.120	32.960	191.080	166.820	35.710	202.530
HV kVA specified demand >2MVA	TAS15															
Service charge (\$/day)		27.515	-	27.515	27.515	-	27.515	28.753	-	28.753	30.047	-	30.047	31.399	-	31.399
Peak energy (c/kWh)		0.932	-	0.932	0.894	-	0.894	0.947	-	0.947	0.928	-	0.928	0.965	-	0.965
Shoulder energy (c/kWh)		0.560	-	0.560	0.537	-	0.537	0.568	-	0.568	0.557	-	0.557	0.579	-	0.579
Off-peak energy (c/kWh)		0.140	-	0.140	0.134	-	0.134	0.142	-	0.142	0.139	-	0.139	0.145	-	0.145
Specified daily demand (c/kVA/day) ⁵³		8.751	-	-	8.563	-	-	9.255	-	-	9.213	-	-	9.770	-	-
Excess daily demand (c/kVA/day) ⁵³		43.759	-	-	42.814	-	-	46.275	-	-	46.065	-	-	48.850	-	-
Daily demand connection (c/kVA) ⁵³		0.318	-	-	0.311	-	-	0.337	-	-	0.335	-	-	0.361	-	-
Excess daily demand connection (c/kVA) ⁵³		1.591	-	-	1.556	-	-	1.682	-	-	1.675	-	-	1.805	-	-

⁵³ The TUoS charges for this tariff relate to “Connection Charges”, the TUoS specified demand charge is per the nodal charge, and the excess daily demand charge is five times the nodal charge.

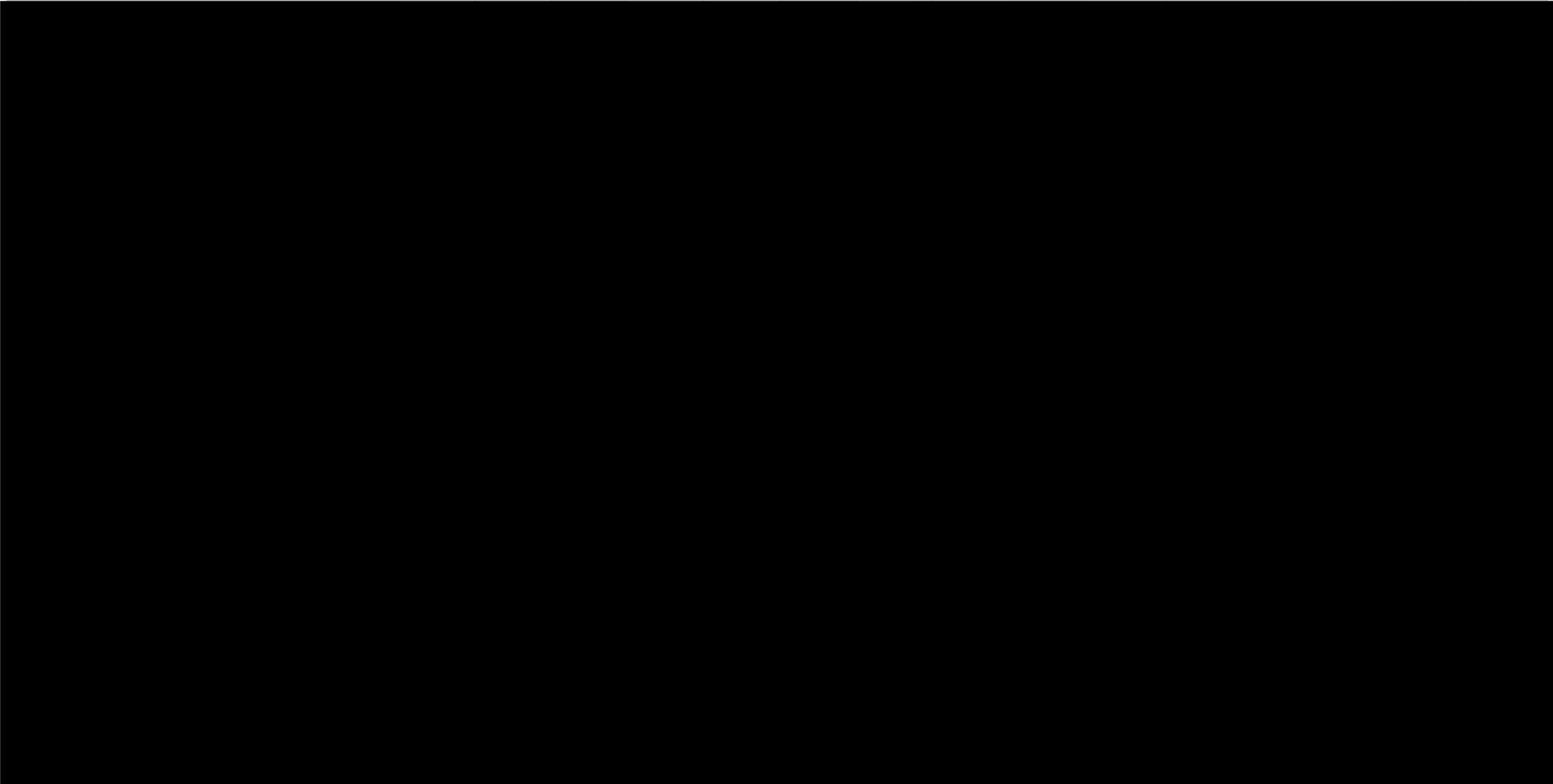
Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS
Uncontrolled Energy																
Heating and hot water	TAS41															
Service charge (c/day)		6.321	-	6.321	6.321	-	6.321	6.511	-	6.511	6.706	-	6.706	6.907	-	6.907
All energy (c/kWh)		3.329	2.213	5.542	3.372	2.017	5.389	3.662	1.860	5.522	3.858	1.964	5.822	4.223	2.081	6.304
Controlled Energy																
Low voltage night period only	TAS63															
Service charge (c/day)		12.044	-	12.044	12.044	-	12.044	12.405	-	12.405	12.777	-	12.777	13.160	-	13.160
All energy (c/kWh)		0.931	0.493	1.424	0.874	0.450	1.324	0.920	0.415	1.335	0.906	0.439	1.345	0.955	0.467	1.422
Low voltage off-peak with afternoon boost	TAS61 ⁵⁴															
Service charge (c/day)		12.044	-	12.044	12.044	-	12.044	12.405	-	12.405	12.777	-	12.777	13.160	-	13.160
All energy (c/kWh)		1.029	0.616	1.645	0.969	0.563	1.532	1.023	0.520	1.543	1.008	0.550	1.558	1.066	0.584	1.650
Unmetered Supply																
Unmetered supply general	TASUMS															
Service charge (c/day)		50.862	-	50.862	50.862	-	50.862	52.388	-	52.388	53.960	-	53.960	55.579	-	55.579
All energy (c/kWh)		8.065	3.094	11.159	7.592	2.827	10.419	7.992	2.609	10.601	7.874	2.763	10.637	8.306	2.936	11.242
Street Lighting																
Street Lighting	TASUMSSL															
All demand (c/lamp watt/day)		0.081	0.027	0.108	0.077	0.026	0.103	0.083	0.024	0.107	0.084	0.026	0.110	0.088	0.028	0.116

⁵⁴ This network tariff is obsolete, and no new connections are allowed.

Appendix B.10. Standard control services – Indicative pricing schedule (ITCs)

Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS

Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS



Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS



Network tariff description	Network tariff code	Approved 2019-20			Approved 2020-21			Approved 2021-22			Proposed 2022-23			Indicative 2023-24		
		DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS	DUoS	TUoS	NUoS



Appendix C Alternative control services

Appendix C.1. Alternative control services – formulae

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

For ancillary service – quoted services, the price cap formula is:

$$Price = Labour + Contractor Services + Materials + Margin$$

Where *Labour* is escalated annual by $(1 + \Delta CPI_t) \times (1 - X_y^i)$

In accordance with the AER's Distribution Determination for TasNetworks, we are only required to provide a calculation of labour rates for ancillary service – quoted services as a component of this Annual Distribution Pricing Proposal.

For the regulatory control period 2019-24 the AER has approved the addition of a margin for ancillary service – quoted services. The margin will be equal to the nominal vanilla WACC. Equation 7 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its alternative control service network tariffs.

Equation 7 – Alternative control services – price cap calculation

\bar{p}_t^i	is the cap on the price of service 'i' in year <i>t</i> .
p_t^i	is the price of service 'i' in year <i>t</i> . The initial value is to be decided in the AER's Distribution Determination for TasNetworks
\bar{p}_{t-1}^i	is the cap on the price of service 'i' in year <i>t</i> – 1.
ΔCPI_t	is the annual percentage change in the Australian Bureau of Statistics Consumer Price Index (CPI) for All Groups, Weighted Average of Eight Capital Cities from the December quarter in year <i>t</i> – 2 to the December quarter in year <i>t</i> – 1
X_t^i	is the 'X' factor as specified in the AER's Distribution Determination for TasNetworks for the relevant alternative control service for the year <i>t</i> .
A_t^i	is the sum of any adjustments for services 'i' in year 't'.
<i>Labour</i>	is the price for each quoted service labour rate as given in the AER's Distribution Determination for TasNetworks
<i>Margin</i>	is the amount equal to TasNetworks' nominal vanilla WACC applied to the cost of labour, contractor services and materials.

Appendix C.2. Alternative control services – application of our tariffs

Table 27 – Application of meter classes for metering services

Meter class	Definition
Domestic LV – single phase	Type 6 metering services provided to residential customers with a single phase connection.
Domestic LV – multi phase	Type 6 metering services provided to residential customers with multiple phase connections.
Domestic LV – CT meters	Type 6 metering services provided to residential customers that require the installation of current or voltage transformers.
Business LV – single phase	Type 6 metering services provided to commercial customers that have a single phase connection.
Business LV – multi phase	Type 6 metering services provided to commercial customers with multiple phase connections.
Business LV – CT meters	Type 6 metering services provided to commercial customers that require the installation of current or voltage transformers.
Other meters (PAYG) <i>This metering tariff is obsolete, with no new connections allowed.</i>	Type 5 or Type 6 metering services provided to customers that do not belong to one of the other meter classes. These meters include the meters that were provided in support of Aurora Energy's Pay As You Go (PAYG) pre-paid product which is no longer offered by Aurora Energy.

Table 28 – Application of public lighting types for public lighting services

Lighting Type	Definition
New technology – minor	The provision, maintenance and replacement of TasNetworks owned new or emerging lighting technology for minor light fittings.
New technology – major	The provision, maintenance and replacement of TasNetworks owned new or emerging lighting technology for major light fittings.
14W LED	The provision, maintenance and replacement of TasNetworks owned 14 watt LED light fittings.
14W LED decorative <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 14 watt LED light fittings.
18W LED <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 18 watt LED light fittings.
18W LED decorative <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 18 watt LED light fittings.
25W LED <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 25 watt LED light fittings.
25W LED decorative <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 25 watt LED light fittings.
42W compact fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 42 watt compact fluorescent light fittings.
42W compact fluorescent – bottom pole entry <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 42 watt compact fluorescent light fittings.

Lighting Type	Definition
70W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 70 watt sodium vapour light fittings.
100W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 100 watt sodium vapour light fittings.
150W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 150 watt sodium vapour light fittings.
250W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 250 watt sodium vapour light fittings.
400W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 400 watt sodium vapour light fittings.
250W sodium vapour – flood light <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 250 watt sodium vapour light fittings.
400W sodium vapour – flood light <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 400 watt sodium vapour light fittings.
100W metal halide <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 100 watt metal halide light fittings.
150W metal halide <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 150 watt metal halide light fittings.
250W metal halide <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 250 watt metal halide light fittings.
400W metal halide <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 400 watt metal halide light fittings.
250W metal halide – flood light <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 250 watt metal halide light fittings.
400W metal halide – flood light <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 400 watt metal halide light fittings.
T5 fluorescent 2 x 24W <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 2 x 24 watt compact fluorescent light fittings.
1 x 20W fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 1 x 20 watt fluorescent light fittings.
50W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 50 watt mercury vapour light fittings.
80W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 80 watt mercury vapour light fittings.
80W mercury vapour – decorative <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 80 watt mercury vapour decorative light fittings.
125W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 125 watt mercury vapour light fittings.

Lighting Type	Definition
250W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 250 watt mercury vapour light fittings.
400W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The provision, maintenance and replacement of TasNetworks owned 400 watt mercury vapour light fittings.

Table 29 – Application of contract lighting types for public lighting services

Lighting Type	Definition
New technology – minor	The maintenance of customer owned new or emerging lighting technology for minor light fittings.
New technology – major	The maintenance of customer owned new or emerging lighting technology for major light fittings.
14W LED	The maintenance of customer owned 14 watt LED light fittings.
14W LED decorative <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 14 watt LED light fittings.
18W LED <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 18 watt LED light fittings.
18W LED decorative <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 18 watt LED light fittings.
25W LED <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 25 watt LED light fittings.
25W LED decorative <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 25 watt LED light fittings.
42W compact fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 42 watt compact fluorescent light fittings.
42W compact fluorescent – bottom pole entry <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 42 watt compact fluorescent light fittings.
70W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 70 watt sodium vapour light fittings.
100W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 100 watt sodium vapour light fittings.
150W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 150 watt sodium vapour light fittings.
250W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 250 watt sodium vapour light fittings.
400W sodium vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 400 watt sodium vapour light fittings.
250W sodium vapour – flood light <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 250 watt sodium vapour light fittings.

Lighting Type	Definition
400W sodium vapour – flood light <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 400 watt sodium vapour light fittings.
100W metal halide <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 100 watt metal halide light fittings.
150W metal halide <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 150 watt metal halide light fittings.
250W metal halide <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 250 watt metal halide light fittings.
400W metal halide <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 400 watt metal halide light fittings.
250W metal halide – flood light <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 250 watt metal halide light fittings.
400W metal halide – flood light <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 400 watt metal halide light fittings.
50W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 50 watt mercury vapour light fittings.
80W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 80 watt mercury vapour light fittings.
80W mercury vapour – decorative <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 80 watt mercury vapour light fittings.
125W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 125 watt mercury vapour light fittings.
250W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 250 watt mercury vapour light fittings.
400W mercury vapour <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 400 watt mercury vapour light fittings.
1 x 20W fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 1 x 20 watt fluorescent light fittings.
2 x 20W fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 2 x 20 watt fluorescent light fittings.
1 x 40W fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 1 x 40 watt fluorescent light fittings.
2 x 40W fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 2 x 40 watt fluorescent light fittings.
3 x 40W fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 3 x 40 watt fluorescent light fittings.
4 x 40W fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 4 x 40 watt fluorescent light fittings.

Lighting Type	Definition
4 x 20W fluorescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 4 x 20 watt fluorescent light fittings.
60W incandescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 60 watt incandescent light fittings.
100W incandescent <i>This lighting type is obsolete, with no new connections allowed.</i>	The maintenance of customer owned 100 watt incandescent light fittings.

Table 30 – Application of ancillary services – fee based services

Service	Definition
Energisation, de-energisation, re-energisation and special reads	
Site visit – no appointment (energisation, de-energisation, re-energisation)	A visit to a customer’s premises during field operational hours on a regular scheduled day for service delivery, where no appointment is required.
Site visit – no appointment (special reads)	A visit to a customer’s premises during field operational hours on a regular scheduled day for service delivery, where no appointment is required.
Site visit – non-scheduled visit	A visit to a customer’s premises during field operational hours where the requested date is on a day that is not a regular scheduled day for service delivery. Visits to customer premises during field operational hours where the visit is required on the same day as the retailer’s request will also be treated as a Site visit – non-scheduled if the request is received by TasNetworks before 11:00am on that day.
Site visit – same day premium service	A visit to a customer’s premises during field operational hours where the visit is required on the same day of a retailer’s request and the request is received by TasNetworks after 11:00am on that day. Requests received after 3:00pm are treated as a Site visit – after hours.
Site visit – after hours	A visit to a customer’s premises where the visit is required on the day of a customer’s request and the request for the service is organised for outside field operational hours.
Site visit – credit action or site issues	A visit to a customer’s premises during field operational hours where no appointment is required on a regular scheduled day for service delivery and the visit is due to a credit issue or a request by a retailer for the site to be de-energised without consultation with the customer.
Site visit – credit action pillar box/pole top	A visit to a customer’s premises during field operational hours where no appointment is required on a regular scheduled day due for services delivery and visit is due to a credit issue to perform a de-energisation other than at the distribution point of attachment, switchboard isolation fuse or disconnect switch and the visit occurs.
Site visit – current transformer (CT) metering	Visit to a customer’s premises during field operational hours on a scheduled service delivery day to de-energise or re-energise a site where current transformer metering exists.
Site visit – pillar box/pole top	A visit to customer’s premises during field operational hours where no appointment is required to de-energise the site by means other than the point of attachment, switchboard isolation fuse or disconnect switch without consultation with the customer.
Site visit – pillar box/pole top wasted visit	A visit to a customer’s premises during field operational hours to undertake a site visit – pillar box/pole top where the service could not be completed due to issues at the customer’s premises.

Service	Definition
Transfer of retailer	The transfer of premises to a new retailer with an effective date as per the scheduled meter read date and where no site visit is required will not incur a fee. The transfer of premises to a new retailer that involves a site visit or requested for a date other than of the scheduled meter read date will incur a site visit fee.
Meter Test	
Meter test – single phase	A visit to a customer’s premises during field operational hours to test a single phase meter at the customer’s request.
Meter test – multi-phase	A visit to a customer’s premises during field operational hours to test a multi-phase meter at the customer’s request.
Meter test – CT	A visit to a customer’s premises during field operational hours to test a current transformer (CT) meter at the customer’s request.
Meter test – after hours	A visit to a customer’s premises outside field operational hours, at the request of the retailer, to undertake a meter test.
Meter test – wasted visit	A visit to a customer’s premises during field operational hours to test a meter at the customer’s request, where the test could not be completed due to issues at the customer’s premises.
Supply abolishment	
Remove service and meters	The removal of meters and a service connection during field operational hours at a customer’s request or prior to building demolition.
Supply abolishment – after hours	A visit to a customer’s premises outside field operational hours, at the request of a retailer, to abolish supply.
Supply abolishment – wasted visit	A visit to a customer’s premises to abolish supply where the service could not be completed due to issues at the customer’s premises.
Truck tee-up	
Tee-up/Appointment	A tee-up with a TasNetworks crew during field operational hours.
Tee-up/Appointment – after hours	A tee-up with overhead crew whilst undertaking work at customer’s installation outside field operational hours.
Tee-up/Appointment – no truck – after hours	A tee-up with underground crew whilst undertaking work at customer’s installation outside field operational hours.
Tee-up – wasted visit	A tee-up where the works could not be completed due to issues on site or where the TasNetworks crew was not required once on site.
Miscellaneous Services	
Open turret	Visit to site to open turret or cabinet during field operational hours for electrical contractor installing or altering customer’s mains.
Data download	Visit to a customer’s premises during field operational hours to download data from a meter.
Alteration to unmetered supply	Visit to a customer’s premises during field operational hours to add or remove a load on an existing unmetered supply site.
Meter relocation	Visit to a customer’s premises during field operational hours to relocate an existing metering position to a new location where the point of attachment has not altered position.
Tiger tails – standard single/multi-phase	Initial visit and return to customer’s premises during field operational hours to install/remove tiger tails. This includes attaching visual warning devices on the

Service	Definition
	service wire and point of attachment and insulated rubber matting where no isolations have been made.
Tiger tails – scaffolding single phase	Initial visit and return to customer’s premises during field operational hours to install/remove tiger tails. This includes attaching visual warning devices on the service wire and point of attachment and insulated rubber matting where the service is required to be disconnected and reconnected to facilitate the installation for a single phase connection.
Tiger tails – scaffolding multi-phase	Initial visit and return to customer’s premises during field operational hours to install/remove tiger tails. This includes attaching visual warning devices on the service wire and point of attachment and insulated rubber matting where the service is required to be disconnected and reconnected to facilitate the installation for a multi-phase connection.
Administration	An administration charge levied when office work is required to be performed to complete a task at the customer’s request that is not described elsewhere.
Network tariff change	A change of network tariff where no site visit is required, only administration actions.
Statutory right – access prevented	A charge to facilitate a standard warrant to access premises in order to disconnect where access is being prevented. This involves administrative actions only.
Emergency maintenance contestable meters	Visit to a customer’s premises during field operational hours to rectify a fault on an external metering provider’s equipment or where an outage has been caused by the metering provider and TasNetworks has to restore power to the customer’s premises.
Emergency maintenance contestable meters – after hours	Visit to a customer’s premises outside field operational hours to rectify a fault on an external metering provider’s equipment or where an outage has been caused by the metering provider and TasNetworks has to restore power to the customer’s premises.
Meter recovery and disposal	Visit to a customer’s premises during field operational hours to remove and dispose of type 5 or 6 meters at the request of the metering provider.
Miscellaneous service	Visit to a customer’s premises, at the request of their retailer, during field operational hours, to perform a service that is not described elsewhere.
Miscellaneous service – after hours	Visit to a customer’s premises outside field operational hours to perform a service that is not described elsewhere.
Miscellaneous service – wasted visit	Visit to a customer’s premises during field operational hours for the requested miscellaneous service where the service could not be completed due to issues on site or where the crew was not required once on site.
Connection establishment charges	
Creation of a NMI	A charge to facilitate the office administration associated with the creation of a NMI.
Overhead service, single span – single phase	A visit to a customer’s premises during field operational hours for the installation of a single span of single phase overhead service wire (off a pole) and associated service fuse.
Overhead service, single span – multi-phase	A visit to a customer’s premises during field operational hours for installation of a single span of multi-phase overhead service wire (off a pole) and associated service fuses.
Underground service in turret/cabinet–single phase	A visit to a customer’s premises during field operational hours for installation of a single phase underground service connecting the customer’s consumer mains to the fuse located in a TasNetworks turret or cabinet.

Service	Definition
Underground service in turret/cabinet – multi-phase	A visit to a customer's premises during field operational hours for installation of a multi-phase underground service connecting the customer's consumer mains to the fuses located in a TasNetworks turret or cabinet.
Underground service with pole mounted fuse – single phase	A visit to a customer's premises during field operational hours for installation of a single phase underground service connecting the customer's consumer mains to a fuse located on a TasNetworks pole or private pole.
Underground service with pole mounted fuse – multi-phase	A visit to a customer's premises during field operational hours for installation of a multi-phase underground service connecting the customer's consumer mains to the fuses located on a TasNetworks pole or private pole.
Basic connection – after hours	A visit to a customer's premises outside field operational hours for the basic connection service
Connection establishment wasted visit	Site visit to provide basic connection service where the connection could not be completed due to issues at the site.
Temporary disconnection charges	
Disconnect/reconnect overhead service for fascia repairs – single phase	A visit to a customer's premises during field operational hours to disconnect and reconnect an existing TasNetworks single span of single phase overhead service wire whilst repairs are made to a fascia containing the customer's connection point for the overhead service wire.
Disconnect/reconnect overhead service pairs – multi-phase	A visit to a customer's premises during field operational hours to disconnect and reconnect an existing TasNetworks single span of multi-phase overhead service wire whilst repairs are made to a fascia containing the customer's connection point for the overhead service wire.
Temporary disconnect/reconnect –	This service involves a visit to a customer's premises during field operational hours at the request of the retailer to perform a temporary disconnection and reconnection. This does not include the removal of a service wire and is for isolation only.
Temporary disconnect/ reconnect – after hours	A visit to a customer's premises outside field operational hours to perform temporary disconnection.
Temporary disconnect/ reconnect – wasted visit	A visit to a customer's premises during field operational hours for the requested temporary disconnection where the service could not be completed due to issues on site or where the crew was not required once on site.
Basic connection alteration	
Connection alteration – overhead single phase Includes: <ul style="list-style-type: none"> • new consumer mains – overhead supply • new consumer mains – underground to pole • changeover new consumer mains to new private pole • changeover overhead service to new point of attachment 	A visit to a customer's premises during field operational hours for a single phase connection alteration following an alteration to the customer's installation. The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.
Connection alteration – overhead multi-phase Includes: <ul style="list-style-type: none"> • new consumer mains – overhead supply 	A visit to a customer's premises during field operational hours for a multi-phase connection alteration following an alteration to the customer's installation. The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.

Service	Definition
<ul style="list-style-type: none"> • new consumer mains –underground to pole • changeover new consumer mains to new private pole • changeover overhead service to new point of attachment 	
Connection of new consumer mains to an existing installation – underground single phase to turret	<p>A visit to a customer’s premises during field operational hours for a connection of new single phase consumer mains to the existing TasNetworks distribution network following an alteration to the customer’s installation.</p> <p>The customer’s supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p>
Connection of new consumer mains to an existing installation – underground single phase to TasNetworks’ pole	<p>A visit to a customer’s premises during field operational hours for a connection of new single phase consumer mains to the existing TasNetworks distribution network following an alteration to the customer’s installation.</p> <p>The customer’s supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p>
Connection of new consumer mains to an existing installation – underground multi-phase to turret	<p>A visit to a customer’s premises during field operational hours for a connection of new multi-phase consumer mains to the existing TasNetworks distribution network following an alteration to the customer’s installation.</p> <p>The customer’s supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p>
Connection of new consumer mains to an existing installation – underground multi-phase to TasNetworks’ pole	<p>A visit to a customer’s premises during field operational hours for a connection of new multi-phase consumer mains to the existing TasNetworks distribution network following an alteration to the customer’s installation.</p> <p>The customer’s supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p>
Augment single phase overhead service to multi-phase supply	<p>A visit to a customer’s premises during field operational hours for a disconnect and remove existing single span of single phase overhead service wire, and associated service fuse, and connect new single span of multi-phase overhead service wire and associated service fuses to the existing TasNetworks distribution network.</p> <p>The existing single phase overhead service wire must be removed and not reused.</p> <p>The customer’s supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p> <p>This service requires a connection application.</p>
Augment multi-phase overhead service to single phase supply	<p>A visit to a customer’s premises during field operational hours for a disconnect and remove existing single span of multi-phase overhead service wire, and associated service fuses, and connect new single span of single phase overhead service wire and associated service fuse to the existing TasNetworks distribution network.</p> <p>The existing multi-phase overhead service wire will be removed and not reused.</p> <p>The customer’s supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p> <p>This service requires a connection application.</p>
Augment single phase overhead service to underground supply (turret)	<p>A visit to a customer’s premises during field operational hours to disconnect and remove existing single span of single phase overhead service wire, and associated service fuse, and connect new single phase underground consumer mains to the fuse located in an existing TasNetworks turret or cabinet.</p> <p>The existing single phase overhead service wire will be removed and not reused.</p>

Service	Definition
	<p>The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p> <p>Customers also requiring the installation of a TasNetworks turret or cabinet will be required to follow TasNetworks' negotiated connection process and will have their charges determined in accordance with that process.</p> <p>This service requires a connection application.</p>
<p>Augment multi-phase overhead service to underground supply (turret)</p>	<p>A visit to a customer's premises during operational hours to disconnect and remove existing single span of multi-phase overhead service wire, and associated service fuses, and connect new multi-phase underground consumer mains to the fuses located in an existing TasNetworks turret or cabinet.</p> <p>The existing multi-phase overhead service wire will be removed and not reused.</p> <p>The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p> <p>Customers also requiring the installation of an TasNetworks turret or cabinet will be required to follow TasNetworks' negotiated connection process and will have their charges determined in accordance with that process.</p> <p>This service requires a connection application.</p>
<p>Augment single phase overhead service to underground supply (TasNetworks' pole)</p>	<p>A visit to a customer's premises during operational hours to disconnect and remove existing single span of single phase overhead service wire, and associated service fuse, and connect new single phase underground consumer mains to a fuse located on a TasNetworks pole.</p> <p>The existing single phase overhead service wire will be removed and not re-used.</p> <p>The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p> <p>This service requires a connection application.</p>
<p>Augment multi-phase overhead service to underground supply (TasNetworks' pole)</p>	<p>A visit to a customer's premises during operational hours to disconnect and remove existing single span of multi-phase overhead service wire, and associated service fuses, and connect new multiphase underground consumer mains to the fuses located on a TasNetworks pole.</p> <p>The existing multi-phase overhead service wire will be removed and not reused.</p> <p>The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.</p> <p>This service requires a connection application.</p>
<p>Basic connection alteration – after hours</p>	<p>A visit to a customer's premises outside operational hours to perform basic connection alteration.</p>
<p>Basic connection wasted visit</p>	<p>Site visit to provide basic connection service where the underground connection could not be completed due to issues at the site.</p>

Table 31 – Application of ancillary services – quoted services

Service
Non-standard services
Removal or relocation of TasNetworks' assets at the request of a customer or third party (for example, the Tasmanian Government)
Services that are provided at a higher standard than the standard service, due to a customer's request for TasNetworks to do so
Provision of overhead or underground subdivision for developers
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
Premises connection services and extension
Connection application services (other than those provided as ancillary services – fee based services)
Design work for a new connection
Access permits, oversight and facilitation
Notice of arrangement
Network related property services
Planned interruption – customer requested
Provision of training to third parties for network related access

Appendix C.3. Alternative control services – 2022-23 proposed tariffs

Table 32 – Proposed tariffs for metering services for 2022-23

Tariff	Tariff component	c/day	Annual charge (\$)
Domestic LV – single phase	Capital	3.71	13.54
	Non capital	3.36	12.26
Domestic LV – multi phase	Capital	7.70	28.10
	Non capital	6.97	25.43
Domestic LV – CT meter	Capital	9.53	34.77
	Non capital	8.62	31.48
Business LV – single phase	Capital	3.84	14.01
	Non capital	3.47	12.68
Business LV – multi phase	Capital	7.67	28.01
	Non capital	6.95	25.37
Business LV – CT meter	Capital	9.93	36.24
	Non capital	8.99	32.81
Other	Capital	6.77	24.72
	Non capital	6.13	22.39

Table 33 – Proposed tariffs for public lighting by type for 2022-23

Lighting type	c/day	Annual charge (\$)
New technology – minor	41.24	150.53
New technology – major	52.91	193.12
14W LED	41.24	150.53
18W LED ⁵⁵	41.64	151.99
18W LED decorative ⁵⁵	54.64	199.44
25W LED ⁵⁵	41.87	152.83
25W LED decorative ⁵⁵	54.86	200.24
42W compact fluorescent ⁵⁵	43.64	159.29
42W compact fluorescent – bottom pole entry ⁵⁵	43.64	159.29
70W sodium vapour ⁵⁵	43.91	160.27
100W sodium vapour ⁵⁵	50.90	185.79
150W sodium vapour ⁵⁵	53.51	195.31
250W sodium vapour ⁵⁵	54.74	199.80
400W sodium vapour ⁵⁵	55.34	201.99
250W sodium vapour – flood light ⁵⁵	58.43	213.27
400W sodium vapour – flood light ⁵⁵	57.79	210.93
100W metal halide ⁵⁵	51.30	187.25
150W metal halide ⁵⁵	53.68	195.93
250W metal halide ⁵⁵	54.60	199.29
400W metal halide ⁵⁵	59.35	216.63
250W metal halide – flood light ⁵⁵	59.60	217.54
400W metal halide – flood light ⁵⁵	59.35	216.63
T5 fluorescent 2 x 24W ⁵⁵	45.82	167.24
1 x 20W fluorescent ⁵⁵	45.53	166.18
50W mercury vapour ⁵⁵	41.42	151.18
80W mercury vapour ⁵⁵	41.41	151.15
80W mercury vapour – decorative ⁵⁵	57.68	210.53
125W mercury vapour ⁵⁵	50.90	185.79
250W mercury vapour ⁵⁵	51.33	187.35
400W mercury vapour ⁵⁵	52.88	193.01

⁵⁵ This lighting type is obsolete

Table 34 – Proposed tariffs for contract lighting by type for 2022-23

Lighting type	c/day	Annual charge
New technology – minor	14.62	53.36
New technology – major	15.37	56.10
14W LED	14.62	53.36
18W LED ⁵⁶	15.06	54.97
18W LED decorative ⁵⁶	15.06	54.97
25W LED ⁵⁶	15.06	54.97
25W LED decorative ⁵⁶	15.06	54.97
42W compact fluorescent ⁵⁶	20.88	76.21
42W compact fluorescent – bottom pole entry ⁵⁶	20.88	76.21
70W sodium vapour ⁵⁶	21.16	77.23
100W sodium vapour ⁵⁶	25.17	91.87
150W sodium vapour ⁵⁶	25.44	92.86
250W sodium vapour ⁵⁶	25.62	93.51
400W sodium vapour ⁵⁶	25.67	93.70
250W sodium vapour – flood light ⁵⁶	25.62	93.51
400W sodium vapour – flood light ⁵⁶	25.67	93.70
100W metal halide ⁵⁶	25.44	92.86
150W metal halide ⁵⁶	25.23	92.09
250W metal halide ⁵⁶	25.23	92.09
400W metal halide ⁵⁶	25.94	94.68
250W metal halide – flood light ⁵⁶	25.23	92.09
400W metal halide – flood light ⁵⁶	25.94	94.68
50W mercury vapour ⁵⁶	20.69	75.52
80W mercury vapour ⁵⁶	20.65	75.37
80W mercury vapour – Aeroscreen ⁵⁶	20.65	75.37
125W mercury vapour ⁵⁶	24.18	88.26
250W mercury vapour ⁵⁶	24.18	88.26
400W mercury vapour ⁵⁶	24.34	88.84
1 x 20W fluorescent ⁵⁶	20.74	75.70
2 x 20W fluorescent ⁵⁶	21.03	76.76
1 x 40W fluorescent ⁵⁶	20.75	75.74
2 x 40W fluorescent ⁵⁶	21.06	76.87
3 x 40W fluorescent ⁵⁶	24.97	91.14
4 x 40W fluorescent ⁵⁶	25.27	92.24

⁵⁶ This lighting type is obsolete

Lighting type	c/day	Annual charge
4 x 20W fluorescent ⁵⁶	21.63	78.95
60W incandescent ⁵⁶	20.58	75.12
100W incandescent ⁵⁶	24.16	88.18

Table 35 – Proposed tariffs for fee based services for 2022-23

Energisation, de-energisation, re-energisation and special reads	2022-23 Price (\$)
Site visit – no appointment (energisation, de-energisation, re-energisation)	84.72
Site visit – no appointment (special reads)	53.77
Site visit – non-scheduled visit	141.75
Site visit – same day premium service	213.92
Site visit – after hours	339.86
Site visit – credit action or site issues	151.76
Site visit – credit action pillar box/pole top	265.24
Site visit – current transformer (CT) metering	136.30
Site visit – pillar box/pole top	265.24
Site visit – pillar box/pole top wasted visit	151.76
Transfer of retailer	-
Meter Test	
	2022-23 Price (\$)
Meter test – single phase	246.25
Meter test – multi-phase	485.15
Meter test – CT	538.25
Meter test – after hours	949.85
Meter test – wasted visit	86.99
Supply abolishment	
	2022-23 Price (\$)
Remove service and meters	269.65
Supply abolishment – after hours	665.12
Supply abolishment – wasted visit	166.49
Truck tee-up	
	2022-23 Price (\$)
Tee-up/Appointment	141.55
Tee-up/Appointment – after hours	716.03
Tee-up/Appointment – no truck – after hours	365.32
Tee-up – wasted visit	88.45
Miscellaneous Services	
	2022-23 Price (\$)
Open turret	126.81
Data download	272.80
Alteration to unmetered supply	206.43
Meter relocation	179.89

Miscellaneous Services	2022-23 Price (\$)
Tiger tails – standard single/multi-phase	663.36
Tiger tails – scaffolding single phase	1,056.99
Tiger tails – scaffolding multi-phase	1,163.16
Administration	51.41
Tariff change	51.41
Statutory right – access prevented	1,273.56
Emergency maintenance contestable meters	55.13
Emergency maintenance contestable meters – after hours	365.32
Meter recovery and disposal	100.27
Miscellaneous service	113.53
Miscellaneous service – after hours	560.16
Miscellaneous service – wasted visit	86.99

Connection establishment charges	2022-23 Price (\$)
Creation of a NMI	42.01
Overhead service, single span – single phase	596.01
Overhead service, single span – multi-phase	851.86
Underground service in turret/cabinet– single phase	179.73
Underground service in turret/cabinet – multi-phase	235.55
Underground service with pole mounted fuse – single phase	453.18
Underground service with pole mounted fuse – multi-phase	578.10
Basic connection – after hours	1,133.81
Connection establishment wasted visit	151.82

Temporary disconnection charges	2022-23 Price (\$)
Disconnect/reconnect overhead service– single phase	442.35
Disconnect/reconnect overhead service– multi-phase	548.54
Temporary disconnect/reconnect	389.27
Temporary disconnect/ reconnect – after hours	949.85
Temporary disconnect/ reconnect – wasted visit	176.91

Basic connection alteration	2022-23 Price (\$)
Connection alteration –overhead single phase	337.65
Connection alteration – overhead multi-phase	443.83
Connection of new consumer mains to an existing installation – underground single phase to turret	204.92
Connection of new consumer mains to an existing installation – underground single phase to TasNetworks' pole	390.74

Basic connection alteration	2022-23 Price (\$)
Connection of new consumer mains to an existing installation – underground multi-phase to turret	258.02
Connection of new consumer mains to an existing installation – underground multi-phase to TasNetworks' pole	496.92
Augment single phase overhead service to multi-phase supply	931.49
Augment multi-phase overhead service to single phase supply	675.62
Augment single phase overhead service to underground supply (turret)	418.64
Augment multi-phase overhead service to underground supply (turret)	524.81
Augment single phase overhead service to underground supply (TasNetworks' pole)	532.81
Augment multi-phase overhead service to underground supply (TasNetworks' pole)	657.73
Basic connection alteration – after hours	1,222.62
Basic connection wasted visit	165.10

Table 36 – Proposed tariffs for quoted services for 2022-23

Meter class	2022-23 Price (\$/hour)
Asset inspector	94.72
Asset inspector – including vehicle	116.23
Cable jointer	121.37
Customer connections – commercial metering	145.57
Customer connections – service crew	131.60
Designer	130.05
Distribution electrical technician	109.74
Distribution electrical technician – including vehicle	131.25
Distribution linesman	118.93
Distribution linesman – live line	131.83
Distribution operator	123.58
Distribution operator – including vehicle	145.10
Engineer	140.35
Senior engineer	161.56
Field service co-ordinator	118.34
General administration	109.10
Labourer – overhead	107.55
Meter reader	101.29
Project manager	146.13