



Annual Distribution Pricing Proposal

2018–19

As submitted to the Australian Energy Regulator



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Creating value for our customers, our owners and our community

TasNetworks provides transmission and distribution network services, delivering Australia's cleanest electricity to Tasmanian homes and businesses. TasNetworks is a State Owned Corporation with total assets of over \$3 billion and our purpose is to create value for our customers, our owners and our community. Our vision is to be trusted by our customers to deliver today and create a better tomorrow.

We are working hard to keep our costs and our prices as low as we sustainably can, while delivering safe and reliable services.

Presently, network costs make up just over 40 per cent of the typical Tasmanian residential electricity bill and we are committed to working to reduce this through the way we charge for the delivery of electricity and access to the distribution network.

Many of our charges take the form of network 'tariffs', which we charge to electricity retailers. Our Tariff Structure Statement outlined key changes we are making to network tariffs and explains why these changes will result in better outcomes for our customers. This document is the start of implementing these changes.

At the heart of our tariff changes is the need to send our customers price signals that better match the demands they place on the network with what it costs us to provide the network. The consumption based network tariffs we have traditionally used to recover the cost of providing and running the electricity network are no longer fit for purpose. In addition to this, recent changes to the National Electricity Rules also require us to apply a more cost reflective approach to determining our tariffs.

This is the beginning of our move towards fairer, more cost reflective network prices. For most customers the transition will involve only small changes. Over a number of years, the changes made to existing network tariffs, plus the introduction of some new demand based network tariffs for residential and small business customers, will see customers pay charges that better reflect their contribution to network costs.

We will not recover any additional revenue as a result of changes to our network tariffs. In fact, in the long term, our revenues may fall as we support a more efficient network.

This is good news for all customers.



Lance Balcombe

Chief Executive Officer

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1 Preface

TasNetworks is the Transmission Network Service Provider (**TNSP**) and Distribution Network Service Provider (**DNSP**) for the Tasmanian region of the National Electricity Market (**NEM**), which includes mainland Tasmania, but not the Bass Strait Islands.

The prices that TasNetworks charges for the use of its distribution network (electricity poles and wires) and the provision of associated services to customers are approved by the Australian Energy Regulator (**AER**). Section 6.18.2(a)(2) of the National Electricity Rules (**Rules**) requires that TasNetworks submit an Annual Distribution Pricing Proposal to the AER, at least three months before the commencement of each regulatory year during a regulatory control period.

Normally, a regulatory control period lasts for five years. However, under a Rule change¹, our current distribution regulatory control period commenced on 1 July 2017 and will end on 30 June 2019. This shorter, two year regulatory control period is a one-off departure from the usual five year regulatory control period that enables the AER's future revenue determinations for our transmission and distribution networks to be aligned from 1 July 2019 onwards.

This is TasNetworks' Annual Distribution Pricing Proposal for the regulatory year commencing on 1 July 2018 and has been prepared to comply with the requirements of the Rules and any additional requirements specified by the AER in its distribution determination for TasNetworks.²

TasNetworks also operates the transmission network in Tasmania which connects power stations and large generators, such as hydro-electric power stations and wind farms, with the distribution network and major industrial users of electricity. All references to TasNetworks within this Annual Distribution Pricing Proposal are in its capacity as a licensed DNSP in the Tasmanian region of the NEM, unless otherwise stated.

¹ Australian Energy Market Commission, Rule Determination: National Electricity Amendment (Aligning TasNetworks' regulatory control periods) Rule 2015, 9 April 2015.

² <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/tasnetworks-formerly-aurora-energy-2017-2019/final-decision>.

2 Introduction

2.1 Scope

This Annual Distribution Pricing Proposal outlines the proposed network tariffs for standard control services and the proposed tariffs (prices) for alternative control services for the 2018-19 regulatory year. The classification of services, tariff classes and tariff structures reflected in this Annual Pricing Proposal are as per the Tariff Structure Statement³ (TSS) approved by the AER in April 2017⁴.

The cost of services provided by TasNetworks where the price is negotiated between TasNetworks and its customers (negotiated services) is not addressed in this pricing proposal.

This document is submitted in accordance with, and complies with, the requirements of the:

- National Electricity Law (NEL);
- National Electricity Rules; and
- the AER's distribution determination for TasNetworks.

2.2 Structure

TasNetworks' Annual Distribution Pricing Proposal is structured as follows.

Table 1 Structure of this document

| Section | Title | Purpose |
|---------|---|--|
| 1 | Preface | Explains the requirement to submit Annual Pricing Proposals and the regulatory control period to which this Annual Distribution Pricing Proposal applies. |
| 2 | Introduction | Outlines the scope, structure and purpose of this Annual Distribution Pricing Proposal. |
| 3 | Tariff classes and tariffs | Provides details of each tariff included under standard control services and alternative control services, including a description of each tariff class and the charging parameters making up each tariff. Also includes an explanation of how customers are assigned to tariff classes based on the Rules and pricing principles. |
| 4 | Pricing principles | Outlines the pricing principles and objectives applied by TasNetworks in setting tariffs and provides the modelling inputs and outputs used to develop the tariffs to recover TasNetworks' regulated revenue in any given year. |
| 5 | Standard control services – pricing proposal requirements | Describes how the methodology used by TasNetworks complies with the Rules and also the pricing-related obligations placed on TasNetworks by the AER's distribution determination. |
| 6 | Transmission charges | Outlines how adjustments to charges for transmission costs and any over and under-recoveries of transmission costs in previous years are calculated and recovered. |

³ TasNetworks Tariff Structure Statement – Formal Statement – April 2017
TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

⁴ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

| Section | Title | Purpose |
|---------|---|---|
| 7 | Standard control services – customer price impacts | Shows the difference in charges between 2017-18 and 2018-19 for each network tariff, as well as the percentage change. |
| 8 | Standard control services pricing | Details each tariff under standard control services and the charging parameters related to each service. |
| 9 | Standard control services – tariff variations | Outlines the proposed variations in tariffs between the 2017-18 and 2018-19 regulatory years. |
| 10 | Alternative control services | Explains the tariff classes applying to alternative control services and sets out the prices applying in 2018-19 to metering, public lighting and ancillary services (both fee based services and quoted services). |
| 11 | Customer price impacts – alternative control services | Sets out the nature of any variations or adjustments to prices applying to alternative control services that could occur during the course of the regulatory year and the basis on which those changes could occur. |
| 12 | Alternative control services – tariff variations | Discusses the impact on customers of the prices proposed for alternative control services in the 2018-19 regulatory year. |
| 13 | Confidential information | Details which parts of this Annual Distribution Pricing Proposal are confidential and provides reasons in support of any confidentiality claims. |
| 14 | Distribution pricing proposal compliance obligations | Sets out TasNetworks' compliance with the requirements of the Rules as they relate to Annual Distribution Pricing Proposals. |
| 15 | Attachments | Lists the attachments to this Annual Distribution Pricing Proposal. |
| 16 | Listing of tables | Lists the tables in this Annual Distribution Pricing Proposal. |

2.3 Supporting documents

TasNetworks has published a range of documents which are intended to assist external parties understand the development and application of the network tariffs and prices for alternative control services set out in this document. This Annual Distribution Pricing Proposal is supported by the following documents:⁵

- Network Tariff Application and Price Guide 2018-19;
- Metering Services Application and Price Guide 2018-19;
- Public Lighting Application and Price Guide 2018-19;
- Ancillary Service – Fee Based Services Application and Price Guide 2018-19;
- Ancillary Service – Quoted Services Application and Price Guide 2018-19;
- Annual Distribution Pricing Proposal Overview 2018-19, and
- TEC Methodology.

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

⁵ The various pricing guides are available on the TasNetworks web site at: <http://www.tasnetworks.com.au/our-network/network-revenue-pricing/distribution-fees-and-tariffs>.

2.4 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:

Commercial Solutions Team Leader
PO Box 606
Moonah TAS 7009
E-mail: network.tariff@tasnetworks.com.au

2.5 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 Rules. TasNetworks' compliance with these requirements is detailed in section 14 of this document (Distribution pricing proposal compliance obligations).



3 Tariff classes and tariffs

3.1 Overview

TasNetworks has selected network tariff classes based on the requirement to group customers on an economically efficient basis that adequately reflects customer characteristics and has regard to the costs of serving those customers. This approach is outlined in section 19 of our TSS⁶.

The Rules set out a range of requirements relating to tariff classes which have been addressed in our TSS, as per the following table.

Table 2 Rule requirements regarding the definition and application of tariff classes

| Rule requirement | TasNetworks' response |
|--|---|
| <ul style="list-style-type: none"> Clause 6.18.3(b) – Each customer for direct control services must be a member of one or more tariff classes. | <ul style="list-style-type: none"> We assign each customer for standard control services to a tariff which is, in turn, grouped by tariff class. Therefore, each customer is a member of at least one tariff class. |
| <ul style="list-style-type: none"> Clause 6.18.3(c) – Separate tariff classes must be constituted for retail customers to whom standard control services are supplied and customers to whom alternative control services are supplied (but a customer for both standard control services and alternative control services may be a member of two or more tariff classes). | <ul style="list-style-type: none"> Tariff classes comprise only customers to whom standard control services are supplied, or alternative control services, but not both. That is, no tariff class comprises customers to whom both standard control services and alternative control services are supplied. |
| <ul style="list-style-type: none"> Clause 6.18.3(d)(1) of the Rules – A tariff class must be constituted with regard to the need to group customers together on an economically efficient basis. | <ul style="list-style-type: none"> We have grouped tariffs into tariff classes based on the need to group customers on an economically efficient basis and in a way that adequately reflects customer characteristics and the costs of serving those customers. For instance, we group residential customers into a single tariff class because these customers tend to have similar characteristics through being low voltage installations for premises that are principally used as residential purposes. |
| <ul style="list-style-type: none"> Clause 6.18.3(d)(2) of the Rules – A tariff class must be constituted with regard to the need to avoid unnecessary transaction costs. | <ul style="list-style-type: none"> See section 3.7 of this document. |

3.2 Network tariff classes – standard control services

In general, the individual, demand and general tariff conditions outlined in this section have remained unchanged from those of the previous regulatory year, with the exception of two new demand-based time of use tariffs designed for residential and small business customers that deploy distributed energy technologies, such as solar panels and battery storage. The network tariff classes for standard control services are shown in Table 3.

⁶ TasNetworks Tariff Structure Statement – Formal Statement – April 2017
TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

Table 3 Network tariff classes – standard control services

| Network tariff class | Network tariff | Description |
|----------------------|--|--|
| Residential | Residential low voltage general (TAS31) | This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. |
| | Residential low voltage pay as you go (TAS101) | 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. This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. <i>This network tariff is obsolete, with no new connections allowed.</i> |
| | Residential low voltage time of use demand (TAS87) | This time of use demand network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. |
| | Residential low voltage pay as you go time of use (TAS92) | This time of use network tariff supports Aurora Energy's 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. This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. |
| | Residential low voltage time of use (TAS93) | This time of use network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. |
| | Residential low voltage Distributed Energy Resources (TAS97) | This time of use demand network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings where electricity storage, generation or electricity management devices – collectively referred to as "distributed energy resources" (DER) – have been deployed behind the meter. <i>Available from 1 December 2018.</i> |
| Small Low Voltage | Business low voltage general (TAS22) | This is the basic, low voltage network tariff for installations that are not private residential dwellings. |
| | Business low voltage nursing homes (TAS34) | This low voltage network tariff is applicable only to those businesses registered as aged care facilities. <i>This network tariff is obsolete, with no new connections allowed.</i> |
| | General network – business, curtilage (TASCURT) | This network tariff is for rural customers having a single low voltage connection point but requiring more than one meter due to site layout. The single connection point must supply an installation qualifying for and being supplied on the Business low voltage general network tariff (TAS22). <i>This network tariff is obsolete, with no new connections allowed.</i> |

| Network tariff class | Network tariff | Description |
|----------------------|---|--|
| | Business low voltage time of use demand (TAS88) | This time of use demand network tariff is for low voltage installations that are not private residential dwellings. |
| | Business low voltage time of use (TAS94) | This is the basic, time of use network tariff for low voltage installations that are not private residential dwellings. |
| | Business low voltage Distributed Energy Resources (TAS98) | This time of use demand network tariff is for low voltage installations that are not private residential dwellings, where electricity storage, generation and/or electricity management devices – collectively referred to as “distributed energy resources” (DER) have been deployed behind the meter. <i>Available from 1 December 2018.</i> |
| Large Low Voltage | Business low voltage kVA demand (TAS82) | This demand-based network tariff is for installations taking low voltage multi-phase supply that are not private residential dwellings. |
| | Large business low voltage time of use demand (TAS89) | This time of use demand network tariff is for installations that are taking low voltage multi-phase supply that are not private residential dwellings. |
| Uncontrolled Energy | Uncontrolled low voltage heating (TAS41) | 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. In installations that are not private residential dwellings, this network tariff is for water heating only. |
| Controlled Energy | Controlled low voltage energy – off peak with afternoon boost (TAS61) | This off-peak network tariff is for low voltage installations and includes an ‘afternoon boost’ component. For installations that are private residential dwellings, this network tariff may be applied to: <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 tariff. For installations that are not private residential dwellings, this network tariff may be applied to: <ul style="list-style-type: none"> • water heating and/or space heating and/or other “wired in” appliances as approved by TasNetworks. <i>Not available to new customers from 2019-20.</i> |

| Network tariff class | Network tariff | Description |
|----------------------|---|--|
| | Controlled low voltage energy – night period only (TAS63) | <p>This network tariff is for low voltage installations and is only available during off-peak periods.</p> <p>For installations that are private residential dwellings, this network tariff may be applied to:</p> <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 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. |
| Irrigation | Irrigation low voltage time of use (TAS75) | This low voltage time of use network tariff is for primary producers' business installations that are used solely for the irrigation of crops, which must be classified as ANZSIC class 01. |
| High Voltage | Business high voltage kVA specified demand (TASSDM) | <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) of the site is less than 2 MVA. <p>Customers on this network tariff are able to agree with TasNetworks on a "Specified Demand" for their electrical installation. Once agreed this value is used in the calculation of Network Use of System (NUoS) charges for 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> |
| | Business high voltage kVA specified demand >2MVA (TAS15) | <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 ATMD of the site is greater than 2 MVA. <p>Customers on this network tariff are able to agree with TasNetworks on a "Specified Demand" for their electrical installation to be used 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> |

| Network tariff class | Network tariff | Description |
|-------------------------------|---|---|
| Individual Tariff Calculation | 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> <p>Terms and conditions for these customers are contained within individually negotiated connection agreements.</p> |
| Unmetered | Unmetered supply low voltage general (TASUMS) | <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 not qualify for this network tariff.</p> |
| Street Lighting | Unmetered supply low voltage public lighting (TASUMSSL) | <p>This network tariff is for customers that have a lighting service provided by TasNetworks.</p> <p>This network tariff does not cover the installation and/or replacement of lamps, which are charged separately.</p> |

| Network tariff class | Network tariff | Description |
|----------------------|--|---|
| Embedded Generator | Residential low voltage import transitional (TASX1I) | <p>This network tariff is available to residential customers with small and micro-embedded generation who have the capacity to export electricity into the distribution network and are eligible for the residential transitional feed-in tariff rate offered through their electricity retailer. The TASX1I tariff is used purely to record the electricity exported by the customer. Customers are assigned to the TASX1I tariff in addition to the network tariff(s) which apply to the delivery of the electricity they consume via the network.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</p> <p>Customer initiated changes to network tariff arrangements will result in ineligibility for the residential low voltage import transitional feed-in tariff rate. Customers who become ineligible for this tariff will be reassigned to the TASX4I network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p> <p><i>This network tariff will end on 31 December 2018, after which customers will be transferred to the TASX4I network tariff.</i></p> |
| | Business low voltage import transitional (TASX2I) | <p>This network tariff is available to commercial installations with small and micro-embedded generation that have the capability to 'export' electricity into the distribution network and are eligible for the business transitional feed-in tariff rate. The TASX2I tariff is used purely to record the electricity exported by the customer. Customers are assigned to the TASX2I tariff in addition to the network tariff(s) which apply to the delivery of the electricity they consume via the network.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</p> <p>Customer initiated changes to network tariff arrangements will result in ineligibility for the residential low voltage import transitional feed-in tariff rate. Customers that become ineligible for this tariff will be reassigned to the TASX5I network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p> <p><i>This network tariff will end on 31 December 2018, after which customers will be transferred to the TASX5I network tariff.</i></p> |

| Network tariff class | Network tariff | Description |
|----------------------|---|---|
| | Residential low voltage import fair and reasonable (TASX4I) | <p>This network tariff is available to residential customers with small and micro-embedded generation who have the capability to 'export' electricity into the distribution network and are eligible for the standard feed-in tariff rate (sometimes referred to as the 'fair and reasonable' feed-in tariff). The TASX4I tariff is used purely to record the electricity exported by the customer. Customers are assigned to the TASX4I tariff in addition to the network tariff(s) which apply to the delivery of the electricity they consume via the network.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p> |
| | Business low voltage import fair and reasonable (TASX5I) | <p>This network tariff is available to commercial installations with small and micro-embedded generation that have the capability to 'export' electricity into the distribution network and are eligible for the standard feed-in tariff rate (sometimes referred to as the 'fair and reasonable' feed-in tariff). The TASX5I tariff is used purely to record the electricity exported by the customer. Customers are assigned to the TASX5I tariff in addition to the network tariff(s) which apply to the delivery of the electricity they consume via the network.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p> |
| | Non-qualifying import (TASX6I) | <p>This network tariff is applied to customers' installations that have small and micro-embedded generation and have the capability to 'export' electricity into the distribution network but are not eligible for any feed-in tariff arrangement. The TASX6I tariff is used purely to record the electricity exported by the customer. Customers are assigned to the TASX6I tariff in addition to the network tariff(s) which apply to the delivery of the electricity they consume via the network.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p> |

3.3 Tariff structure and charging parameters

TasNetworks' TSS⁷ sets out our tariff structure and network charging parameters.

3.3.1 Recovery of Distribution Use of System

Network tariffs and charging parameters are designed to recover the approved revenue, consistent with the calculation of the Revenue Cap. The network charging parameters adopted by TasNetworks for the recovery of standard control services Distribution Use of System (DUoS) tariffs are detailed in Table 4.

Table 4 Recovery of Distribution Use of System

| Tariff class | Network tariff code | Network Tariff charging (Parameter) | | | | |
|-------------------------------|---------------------|-------------------------------------|------------------------------------|--------------------------|---------------------------|-------------------------------------|
| | | Daily charge (c/day) | Volume charge ¹ (c/kWh) | Demand charge (c/kW/day) | Demand charge (c/kVA/day) | Specified demand charge (c/kVA/day) |
| Residential | TAS31 | ✓ | ✓ | | | |
| | TAS92 | ✓ | ✓ | | | |
| | TAS101 | ✓ | ✓ | | | |
| | TAS87 | ✓ | | ✓ ² | | |
| | TAS93 | ✓ | ✓ ² | | | |
| | TAS97 | ✓ | | ✓ | | |
| Small Low Voltage | TAS22 | ✓ | ✓ | | | |
| | TAS34 | ✓ | ✓ | | | |
| | TASCURT | ✓ | ✓ | | | |
| | TAS88 | ✓ | | ✓ ² | | |
| | TAS94 | ✓ | ✓ ³ | | | |
| | TAS98 | ✓ | | ✓ | | |
| Large Low Voltage | TAS82 | ✓ | ✓ | | ✓ | |
| | TAS89 | ✓ | | | ✓ ² | |
| Uncontrolled Energy | TAS41 | ✓ | ✓ | | | |
| Controlled Energy | TAS61 | ✓ | ✓ | | | |
| | TAS63 | ✓ | ✓ | | | |
| Irrigation | TAS75 | ✓ | ✓ ³ | | | |
| High Voltage | TASSDM | ✓ | ✓ ³ | | | ✓ |
| | TAS15 | ✓ | ✓ ³ | | | ✓ |
| Individual Tariff Calculation | TASCUS1 | ✓ | ✓ | | | ✓ |
| | TASCUS2 | ✓ | ✓ | | | ✓ |

⁷ TasNetworks Tariff Structure Statement – Formal Statement – April 2017
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| Tariff class | Network tariff code | Network Tariff charging (Parameter) | | | | |
|----------------------------------|---------------------|-------------------------------------|------------------------------------|--------------------------|---------------------------|-------------------------------------|
| | | Daily charge (c/day) | Volume charge ¹ (c/kWh) | Demand charge (c/kW/day) | Demand charge (c/kVA/day) | Specified demand charge (c/kVA/day) |
| | TASCUS3 | ✓ | ✓ ³ | | | ✓ |
| | TASCUS4 | ✓ | ✓ ³ | | | ✓ |
| Unmetered | TASUMS | ✓ | ✓ | | | |
| Street Lighting | TASUMSSL | | ✓ ⁴ | | | |
| Embedded Generation ⁵ | TASX1I | | | | | |
| | TASX2I | | | | | |
| | TASX4I | | | | | |
| | TASX5I | | | | | |
| | TASX6I | | | | | |

- 1 Volume charge can be a combination of step or time of use parameters.
- 2 These charges comprise both peak and off peak components.
- 3 These charges comprise peak, shoulder and off peak components.
- 4 Public lighting is charged on the basis of c/lamp watt/day.
- 5 There are no charges for this tariff class.

3.3.2 Recovery of Transmission Use of System

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 transmission cost recovery and billing, the distribution network's connections with the transmission network are treated as if they belong to an independent customer. Transmission use of system (TUoS) charges levied on the distribution network are, in turn, recovered by TasNetworks from customers connected to the distribution network as a component of network tariffs.

The network tariffs applied to customers connected to the distribution network, to recover transmission costs, 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 TasNetworks⁸. TUoS charges are allocated to network tariff classes using the Total Efficient Cost (TEC) model⁹. The TUoS charges applied to the distribution network and recovered from customers connected to the distribution network comprise variable charges only.

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. Consequently, TasNetworks only preserves the locational pricing signals within the transmission network charges 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 demand (>2MVA) network tariffs (TASSDM, TAS15, and ITC).

⁸ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

⁹ See attachment PP001 to this Annual Distribution Pricing Proposal entitled 'TEC Methodology'.

The network charging parameters adopted by TasNetworks for the recovery of standard control services TUoS tariffs are detailed in Table 5.

Table 5 Recovery of Transmission Use of System

| Tariff class | Network tariff code | Network Tariff charging (Parameter) | | | | Specified demand charge (c/kVA/day) |
|----------------------------------|---------------------|-------------------------------------|------------------------------------|--------------------------|---------------------------|-------------------------------------|
| | | Daily charge (c/day) | Volume charge ¹ (c/kWh) | Demand charge (c/kW/day) | Demand charge (c/kVA/day) | |
| Residential | TAS31 | | ✓ | | | |
| | TAS92 | | ✓ | | | |
| | TAS101 | | ✓ | | | |
| | TAS87 | | | ✓ ² | | |
| | TAS93 | | ✓ ² | | | |
| | TAS97 | | | ✓ | | |
| Small Low Voltage | TAS22 | | ✓ | | | |
| | TAS34 | | ✓ | | | |
| | TASCURT | | ✓ | | | |
| | TAS88 | | | ✓ ² | | |
| | TAS94 | | ✓ ³ | | | |
| | TAS98 | | | ✓ | | |
| Large Low Voltage | TAS82 | | ✓ | | ✓ | |
| | TAS89 | | | | ✓ ² | |
| Uncontrolled Energy | TAS41 | | ✓ | | | |
| Controlled Energy | TAS61 | | ✓ | | | |
| | TAS63 | | ✓ | | | |
| Irrigation | TAS75 | | ✓ ³ | | | |
| HV | TASSDM | | ✓ ³ | | | ✓ |
| | TAS15 | | | | | ✓ ⁴ |
| ITC | TASCUS1 | | | | | ✓ ⁴ |
| | TASCUS2 | | | | | ✓ ⁴ |
| | TASCUS3 | | | | | ✓ ⁴ |
| | TASCUS4 | | | | | ✓ ⁴ |
| Unmetered | TASUMS | | ✓ | | | |
| Street Lighting | TASUMSSL | | ✓ ⁵ | | | |
| Embedded Generation ⁶ | TASX1I | | | | | |
| | TASX2I | | | | | |
| | TASX4I | | | | | |
| | TASX5I | | | | | |

| Tariff class | Network tariff code | Network Tariff charging (Parameter) | | | | |
|--------------|---------------------|-------------------------------------|------------------------------------|--------------------------|---------------------------|-------------------------------------|
| | | Daily charge (c/day) | Volume charge ¹ (c/kWh) | Demand charge (c/kW/day) | Demand charge (c/kVA/day) | Specified demand charge (c/kVA/day) |
| | TASX6I | | | | | |

- 1 Volume charge can be a combination of step or time of use parameters.
- 2 These charges comprise both peak and off peak components.
- 3 These charges comprise peak, shoulder and off peak components.
- 4 Demand charge is locational and based upon the transmission connection point.
- 5 Public lighting is charged on the basis of c/lamp watt/day.
- 6 There are no charges for this tariff class.

3.4 Tariff classes – alternative control services

TasNetworks has made changes to the existing tariff class for alternative control services as set out in our TSS¹⁰, and the changes are also discussed in section 12. The following tables set out the metering, public lighting, ancillary service – fee based services and ancillary service – quoted service groupings of alternative control services:

- Table 6 Meter classes for metering services
- Table 7 Public lighting types for public lighting services
- Table 8 Contract lighting types for public lighting services
- Table 9 Ancillary service – fee based services
- Table 10 Ancillary service – quoted services

Table 6 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) | 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 are provided in support of Aurora Energy's Pay As You Go pre-paid metering product. This meter class does not apply to metering services where the prepayment facility is fully incorporated as a component of the provision of that meter. |

¹⁰ TasNetworks Tariff Structure Statement – Formal Statement – April 2017
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Table 7 Public lighting types for public lighting services

| Lighting type | Definition |
|---|---|
| 18W LED | The provision, maintenance and replacement of TasNetworks owned 18 watt LED light fittings. |
| 18W LED decorative | The provision, maintenance and replacement of TasNetworks owned 18 watt LED light fittings. |
| 25W LED | The provision, maintenance and replacement of TasNetworks owned 25 watt LED light fittings. |
| 25W LED decorative | The provision, maintenance and replacement of TasNetworks owned 25 watt LED light fittings. |
| 42W compact fluorescent | The provision, maintenance and replacement of TasNetworks owned 42 watt compact fluorescent light fittings. |
| 42W compact fluorescent – bottom pole entry | The provision, maintenance and replacement of TasNetworks owned 42 watt compact fluorescent light fittings. |
| 70W sodium vapour | The provision, maintenance and replacement of TasNetworks owned 70 watt sodium vapour light fittings. |
| 100W sodium vapour | The provision, maintenance and replacement of TasNetworks owned 100 watt sodium vapour light fittings. |
| 150W sodium vapour | The provision, maintenance and replacement of TasNetworks owned 150 watt sodium vapour light fittings. |
| 250W sodium vapour | The provision, maintenance and replacement of TasNetworks owned 250 watt sodium vapour light fittings. |
| 400W sodium vapour | The provision, maintenance and replacement of TasNetworks owned 400 watt sodium vapour light fittings. |
| 250W sodium vapour – flood light | The provision, maintenance and replacement of TasNetworks owned 250 watt sodium vapour light fittings. |
| 400W sodium vapour – flood light | The provision, maintenance and replacement of TasNetworks owned 400 watt sodium vapour light fittings. |
| 100W metal halide | The provision, maintenance and replacement of TasNetworks owned 100 watt metal halide light fittings. |
| 150W metal halide | The provision, maintenance and replacement of TasNetworks owned 150 watt metal halide light fittings. |
| 250W metal halide | The provision, maintenance and replacement of TasNetworks owned 250 watt metal halide light fittings. |
| 400W metal halide | The provision, maintenance and replacement of TasNetworks owned 400 watt metal halide light fittings. |
| 250W metal halide – flood light | The provision, maintenance and replacement of TasNetworks owned 250 watt metal halide light fittings. |
| 400W metal halide – flood light | The provision, maintenance and replacement of TasNetworks owned 400 watt metal halide light fittings. |
| T5 fluorescent 2 x 24W | The provision, maintenance and replacement of TasNetworks owned 2 x 24 watt compact fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed</i> |

| Lighting type | Definition |
|---------------------------------|--|
| 1 x 20W fluorescent | The provision, maintenance and replacement of TasNetworks owned 1 x 20 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed</i> |
| 50W mercury vapour | The provision, maintenance and replacement of TasNetworks owned 50 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed</i> |
| 80W mercury vapour | The provision, maintenance and replacement of TasNetworks owned 80 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |
| 80W mercury vapour – decorative | The provision, maintenance and replacement of TasNetworks owned 80 watt mercury vapour decorative light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |
| 125W mercury vapour | The provision, maintenance and replacement of TasNetworks owned 125 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |
| 250W mercury vapour | The provision, maintenance and replacement of TasNetworks owned 250 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |
| 400W mercury vapour | The provision, maintenance and replacement of TasNetworks owned 400 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |

Table 8 Contract lighting types for public lighting services

| Lighting type | Definition |
|---|---|
| 18W LED | The maintenance of customer owned 18 watt LED light fittings. |
| 18W LED decorative | The maintenance of customer owned 18 watt LED light fittings. |
| 25W LED | The maintenance of customer owned 25 watt LED light fittings. |
| 25W LED decorative | The maintenance of customer owned 25 watt LED light fittings. |
| 42W compact fluorescent | The maintenance of customer owned 42 watt compact fluorescent light fittings. |
| 42W compact fluorescent – bottom pole entry | The maintenance of customer owned 42 watt compact fluorescent light fittings. |
| 70W sodium vapour | The maintenance of customer owned 70 watt sodium vapour light fittings. |
| 100W sodium vapour | The maintenance of customer owned 100 watt sodium vapour light fittings. |
| 150W sodium vapour | The maintenance of customer owned 150 watt sodium vapour light fittings. |
| 250W sodium vapour | The maintenance of customer owned 250 watt sodium vapour light fittings. |
| 400W sodium vapour | The maintenance of customer owned 400 watt sodium vapour light fittings. |

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

| Lighting type | Definition |
|---------------------|--|
| 2 x 40W fluorescent | The maintenance of customer owned 2 x 40 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |
| 3 x 40W fluorescent | The maintenance of customer owned 3 x 40 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed</i> |
| 4 x 40W fluorescent | The maintenance of customer owned 4 x 40 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |
| 4 x 20W fluorescent | The maintenance of customer owned 4 x 20 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |
| 60W incandescent | The maintenance of customer owned 60 watt incandescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |
| 100W incandescent | The maintenance of customer owned 100 watt incandescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i> |

Table 9 Ancillary service – fee based services

| Service | Description |
|---|--|
| Energisation, de-energisation, re-energisation and special reads | |
| Site visit – no appointment | A visit to a customer’s premises during normal 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 normal operational hours where the requested date is on a day that is not a regular scheduled day for service delivery. |
| Site visit – same day premium service | A visit to a customer’s premises during normal 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. |
| 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 normal operational hours. |
| Site visit – credit action or site issues | A visit to a customer’s premises during normal 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 normal 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. |

| Service | Description |
|--|--|
| Site visit – current transformer (CT) metering | Visit to a customer's premises during normal 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 normal 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 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. |
| 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 alteration | |
| Tariff alteration – single phase | A visit to a customer's premises during normal operational hours to add or modify a single phase metering circuit. |
| Tariff alteration – multi-phase | A visit to a customer's premises during normal operational hours to add or modify a multi-phase metering circuit. |
| Adjust time clock | A visit to a customer's premises during normal operational hours to adjust the time period of an existing time clock. |
| Install pulse outputs | A visit to a customer's premises during normal operational hours to install a pulse output facility. |
| Remove meter – single phase | A visit to a customer's premises during normal operational hours to remove a single phase metering circuit. |
| Remove meter – multi-phase | A visit to a customer's premises during normal operational hours to remove a multi-phase metering circuit. |
| Meter alteration – after hours visit | A visit to a customer's premises outside normal operational hours to undertake a meter alteration. |
| Meter alteration – wasted visit | A visit to a customer's premises during normal operational hours to undertake a meter alteration where the alteration could not be completed due to issues at the customer's premises. |
| Meter test | |
| Meter test – single phase | A visit to a customer's premises during normal 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 normal operational hours to test a multi-phase meter at the customer's request. |
| Meter test – CT | A visit to a customer's premises during normal 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 normal operational hours, at the request of the retailer, to undertake a meter test. |

| Service | Description |
|--|---|
| Meter test –wasted visit | A visit to a customer’s premises during normal 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 normal operational hours at a customer’s request or prior to building demolition. |
| Supply abolishment – after hours | A visit to a customer’s premises outside normal 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 operational hours. |
| Tee-up/Appointment – after hours | A tee-up with overhead crew whilst undertaking work at customer’s installation outside operational hours. |
| Tee-up/Appointment – no truck – after hours | A tee-up with underground crew whilst undertaking work at customer’s installation outside 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 operational hours for electrical contractor installing or altering customer’s mains. |
| Data download | Visit to a customer’s premises during operational hours to download data from a meter. |
| Alteration to unmetered supply | Visit to a customer’s premises during operational hours to add or remove a load on an existing unmetered supply site. |
| Meter relocation | Visit to a customer’s premises during operational hours to relocate an existing metering position to a new location where the point of attachment has not altered position. |
| Miscellaneous service | Visit to a customer’s premises, at the request of their retailer, during operational hours, to perform a service that is not described elsewhere. |
| Miscellaneous service – after hours | Visit to a customer’s premises outside operational hours to perform a service that is not described elsewhere. |
| Miscellaneous service – wasted visit | Visit to a customer’s premises during 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 | |
| Overhead service, single span – single phase | A visit to a customer’s premises during field operation hours for the installation of a single span of single phase overhead service wire (off a pole) and associated service fuse. |

| Service | Description |
|---|---|
| Overhead service, single span – multi-phase | A visit to a customer’s premises during operation 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 operation 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. |
| Underground service in turret/cabinet – multi-phase | A visit to a customer’s premises during operation 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 operation 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 operation 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 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. |
| Renewable energy connection | |
| Modify existing connection for micro embedded generation – single phase | A visit to a customer’s premises during operation hours to supply and install single phase dual register basic import/export metering equipment. This service requires a connection application. |
| Modify existing connection for micro embedded generation – multi-phase | A visit to a customer’s premises during operation hours to supply and install multi-phase dual register basic import/export metering equipment. This service requires a connection application. |
| Renewable energy connection – after hours | Supply and install single phase dual register basic import/export metering equipment at a customer’s premises, outside operational hours. |
| Renewable energy connection – wasted visit | A visit to a customer’s premises during operational hours to modify existing connection for micro embedded generations where the service could not be completed due to issues on site or where the crew was not required once on site. |
| Temporary disconnections charges | |
| Disconnect/reconnect overhead service for fascia repairs – single phase | A visit to a customer’s premises during operation 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. |

| Service | Description |
|--|--|
| Disconnect/reconnect overhead service for fascia repairs – multi-phase | A visit to a customer’s premises during operation 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 – after hours | A visit to a customer’s premises outside operational hours to perform temporary disconnection. |
| Temporary disconnect/reconnect – wasted visit | A visit to a customer’s premises during 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 operation 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 • 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 operation 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. |
| Connection of new consumer mains to an existing installation – underground single phase to turret or pole | A visit to a customer’s premises during 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. The customer’s supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided. |

| Service | Description |
|---|--|
| <p>Connection of new consumer mains to an existing installation – underground multi-phase to turret or pole</p> | <p>A visit to a customer’s premises during 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> |
| <p>Augment single phase overhead service to multi-phase supply</p> | <p>A visit to a customer’s premises during 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> |
| <p>Augment multi-phase overhead service to single phase supply</p> | <p>A visit to a customer’s premises during 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> |
| <p>Augment single 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 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> <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> |



| Service | Description |
|--|--|
| Augment single phase overhead service to underground supply (pole) | <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> |
| Augment multi-phase overhead service to underground supply (pole) | <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> |
| Basic connection alteration – after hours | <p>A visit to a customer's premises outside operational hours to perform basic connection alteration.</p> |

Table 10 Ancillary service – quoted services

| Service |
|--|
| New design and construction fees |
| <ul style="list-style-type: none"> • Standard application fee |
| <ul style="list-style-type: none"> • Application fee |
| <p>Maximum service:</p> <ul style="list-style-type: none"> • Design Cost – design audit fee (small) • Design cost – design audit fee (large) • Design cost – design audit fee (major) • Construction cost – construction audit fee (small) • Construction cost – construction audit fee (large) • Construction cost – construction audit fee (major) |
| <p>Minimum service:</p> <ul style="list-style-type: none"> • Design cost – design audit fee (small) • Design cost – design audit fee (large) • Design cost – design audit fee (major) • Construction cost – construction audit fee (small) • Construction cost – construction audit fee (large) • Construction cost – construction audit fee (major) |

| Service |
|--|
| Non-standard services |
| Removal or relocation of TasNetworks' assets at a customer's premises (for example, a request from 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 public lighting schemes |
| Design work for a new connection |
| Relocation of assets at the request of a third party |
| Services that are provided through a non-standard process at a customer's request (for example, where more frequent meter reading is required) |

3.5 Assignment of customers to tariffs

Section 5 of our TSS¹¹ sets out the principles TasNetworks must adhere to in assigning customers to tariff classes and applies to all direct control services (i.e. both standard control and alternative control services).

The assignment processes are discussed in more detail in the attached Network Tariff Application and Price Guide (PP002); Metering Services Application and Price Guide (PP003); Public Lighting Application and Price Guide (PP004); and Ancillary Services – Fee Based Services Application and Price Guide (PP005).

3.6 System of assessment and review of the basis on which a customer is charged

In accordance with the AER's distribution determination¹², 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 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 tariff classes as part of the annual process of developing its tariffs for AER approval. 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 tariff or tariff class, or that the basis of the customer's demand charges should be amended. This change is usually the result of changes in the customer's energy consumption, expected maximum demand or connection characteristics. These procedures ensure the customer's underlying 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 review and change a network tariff assigned to a customer 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

¹¹ TasNetworks Tariff Structure Statement – Formal Statement – April 2017

¹² Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

procedures and criteria discussed above to determine if it is appropriate to change the network tariff assigned to a customer.

3.7 Transaction costs

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

TasNetworks has not altered the structure or format of its network tariffs from the previous regulatory year with the exception of the introduction of two new distributed energy resource time of use demand tariffs. As discussed in our proposed TSS (2019-2024)¹³ we have consulted with our customers to provide awareness of the structure of the new (opt-in) demand tariffs. Except for our new demand based tariffs, TasNetworks' charging parameters and network tariffs are well known to our customers and their retailers.

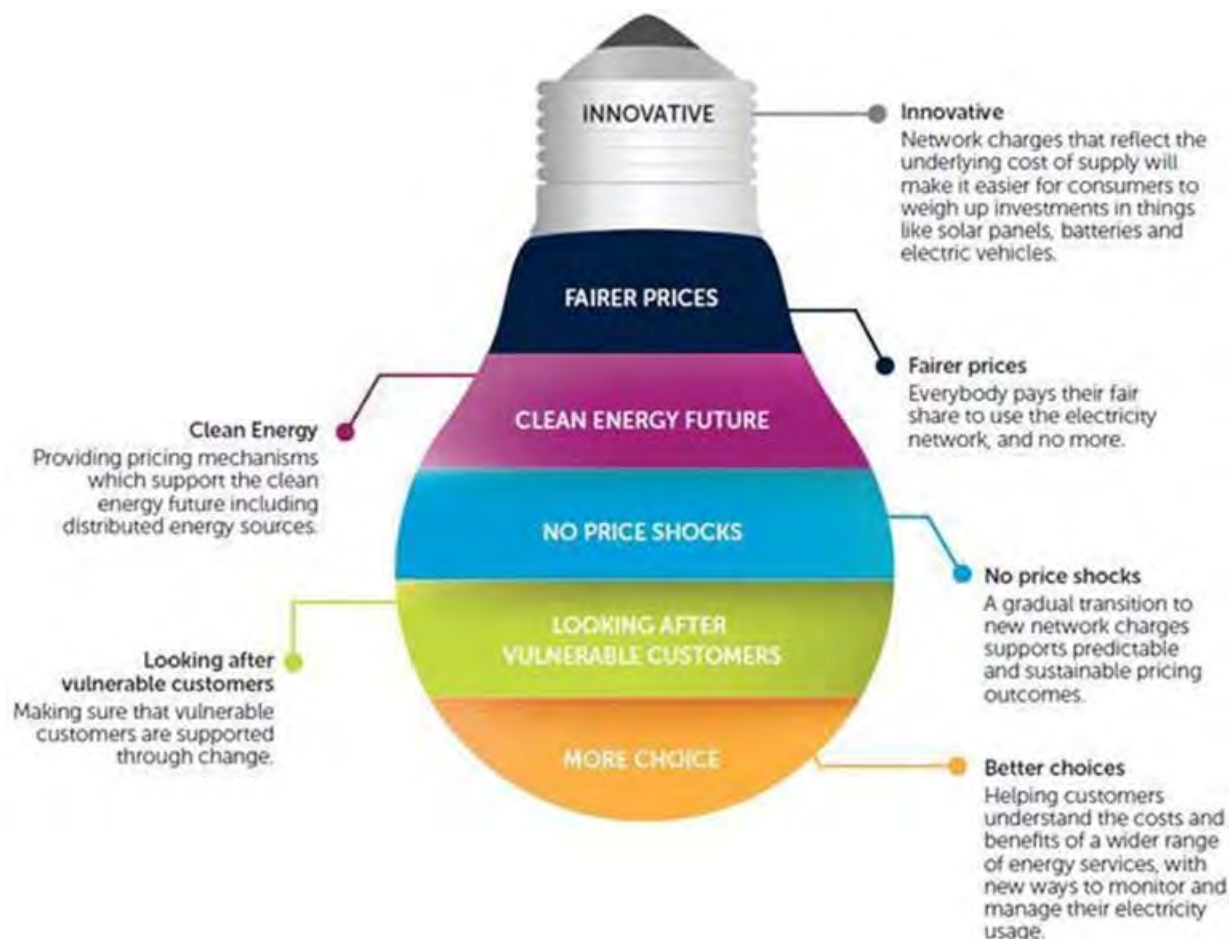
A combination of various parameters has been used to ensure that appropriate pricing signals are provided to customers. However, the number and design of these parameters has been selected with regard to minimising the associated transaction costs.

¹³ TasNetworks Tariff Structure Statement 2019-2024 – January 2018

4 Pricing principles

The following illustration highlights some of the key benefits of network tariff reform for our customers.

Figure 1: Key benefits of network tariff reform



4.1 Overview

TasNetworks' TSS¹⁴ sets out our pricing principles we have developed with our customers. Any new or revised tariffs are assessed against the principles. TasNetworks' pricing principles are:

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

¹⁴ TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

Clause 6.18.5 of the Rules sets out the principles that TasNetworks should adopt in preparing our tariffs. TasNetworks' pricing principles reflect the requirements of the Rules. Section 15 of our TSS¹⁵ sets out how we have addressed the rule requirements in our pricing principles.

4.2 Stand-alone and avoidable costs

Clause 6.18.5(e) of the Rules requires that the revenue expected to be recovered from each tariff class lie on or between an upper bound representing the stand-alone cost of serving the customers who belong to that class and a lower bound representing the avoidable cost of not serving those customers.

The Rules do not specifically define avoidable and stand-alone costs or set out the methodology that should be applied to calculate these costs. TasNetworks has set out its interpretation of both stand-alone and avoidable costs in the TSS¹⁵.

4.3 Stand-alone and avoidable costs – standard control services

TasNetworks' TSS¹⁵ outlines the approach to the calculation of stand-alone and avoidable costs for standard control services. TasNetworks has not changed its approach to calculating stand-alone and avoidable cost from the approach outline in the TSS¹⁵.

Table 11 demonstrates that we expect the revenue in each network tariff class for standard control services to fall between the avoidable and stand-alone costs for each network tariff class.

Table 11 Stand-alone and avoidable cost boundaries 2018-19

| Network tariff class | Avoidable cost (\$m) | Expected revenue (\$m)* | Stand-alone cost (\$m) |
|----------------------------------|----------------------|-------------------------|------------------------|
| Individual Tariff Calculation | 0.036 | 1.326 | 229.449 |
| High Voltage | 0.405 | 7.012 | 229.801 |
| Irrigation | 0.639 | 6.567 | 230.053 |
| Large Low Voltage | 1.883 | 19.835 | 231.290 |
| Small Low Voltage | 3.135 | 55.667 | 230.944 |
| Residential | 7.831 | 115.798 | 235.970 |
| Uncontrolled Energy | 0.000 | 33.149 | 229.414 |
| Controlled Energy | 0.000 | 1.482 | 229.414 |
| Unmetered | 0.033 | 0.994 | 229.447 |
| Street Lighting | 0.118 | 1.577 | 229.531 |
| Embedded Generation [#] | n.a. | n.a. | n.a. |

* The expected revenue excludes side constraint adjustments.

[#] We do not apply a charge for this network tariff class.

4.4 Stand-alone and avoidable costs – alternative control services

TasNetworks provides its alternative control services using a mix of shared and dedicated physical assets and labour. It prices each of these services on a full cost recovery basis using the formula approved by the AER.

¹⁵ TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

4.5 Long run marginal cost

Clause 6.18.5(f) of the Rules requires that each 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:

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

Section 15.3 of our TSS¹⁶ sets out our approach to estimating LRMC using the average incremental cost method.

Table 12 sets out the LRMC estimates using the methodology in our TSS¹⁶.

Table 12 Estimated long run marginal costs

| Network tariff class | Network tariff | Long run marginal cost (\$/kW) | |
|----------------------|---|--------------------------------|---------|
| | | 2017-18 | 2018-19 |
| High Voltage | Business High Voltage kVA Specified Demand (TASSDM) | 70 | |
| | Business High Voltage kVA Specified Demand >2MVA (TAS15) | 110 | |
| Irrigation | Irrigation Low Voltage Time of Use (TAS75) | 138 | |
| Large Low Voltage | Business Low Voltage kVA Demand (TAS82) | 89 | |
| | Large Low Voltage Commercial Time of Use Demand (TAS89) | 89 | |
| Small Low Voltage | Low Voltage Commercial Time of Use Demand (TAS88) | 129 | |
| | Business low voltage Distributed Energy Resources (TAS98) | 117 ¹⁷ | |
| | Business Low Voltage General (TAS22) | 165 | |

¹⁶ TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

| Network tariff class | Network tariff | Long run marginal cost (\$/kW) | |
|----------------------|---|--------------------------------|---------|
| | | 2017-18 | 2018-19 |
| | Business Low Voltage Nursing Homes (TAS34) | 91 | |
| | General Network – Business, Curtilage (TASCURT) | 165 | |
| | Business Low Voltage Time of Use (TAS94) | 129 | |
| Residential | Residential Time of Use Demand Tariff (TAS87) | 182 | |
| | Residential low voltage Distributed Energy Resources (TAS97) | 152 ¹⁷ | |
| | Residential Low Voltage General (TAS31) | 182 | |
| | Residential Low Voltage PAYG (TAS101) | 182 | |
| | Residential Low Voltage PAYG Time of Use (TAS92) | 182 | |
| | Residential Low Voltage Time of Use (TAS93) | 182 | |
| Uncontrolled Energy | Uncontrolled Low Voltage Heating (TAS41) | 122 | |
| Controlled Energy | Controlled Low Voltage Energy – Off Peak with afternoon boost (TAS61) | 146 | |
| | Controlled Low Voltage Energy – Night period only (TAS63) | 146 | |
| Unmetered | Unmetered Supply Low Voltage General (TASUMS) | 167 | |
| Street Lighting | Unmetered Supply Low Voltage Public Lighting (TASUMSSL) | 167 | |

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TasNetworks has determined the costs to be recovered from a tariff class, and designed the charging parameters within a network tariff, in order to reflect long term cost and provide effective price signals to customers. Our network tariffs and charging parameters are designed to recover amounts from tariff classes which are reflective of the costs of providing services to these customers, and send pricing signals to customers through the selection of appropriate charging parameters.

TasNetworks has designed its network tariffs to contain a combination of charging parameters in order to reflect LRM and recover the total allowable revenue:

- where appropriate, a specified demand charge may take into account the long term demand peak and can provide effective pricing signals to customers of excessive load;
- an any-time demand charge is used to take into account short term peaks in demand;
- time of use demand charge can provide effective pricing signal for short term peaks in demand in peak and off-peak periods;
- energy charges are used where appropriate; and
- fixed charges are used to ensure the remaining costs including the costs associated with connection assets are recovered.

4.6 Total efficient cost

Clause 6.18.5(g) of the Rules requires that each tariff must reflect the Distribution Network Service Provider's total efficient cost of serving the retail customers that are assigned to that tariff. Our Total Efficient Costs (TEC) methodology is included as an attachment to this pricing proposal (PP001). Using this methodology we have estimated the revenue that needed to be recovered from each tariff class by determining the proportion of our revenue allowance that is attributable to each network tariff class and each network tariff.

Network tariffs have been set to transition to the TEC levels over the medium to longer term. The transitional path has been selected to reduce the potential for price shocks to customers.

4.7 Impact on retail customers

Clause 6.18.5(h) of the Rules require us to consider the impact on retail customers. Our TSS¹⁸ outlines the network tariff reforms we are implementing. Our reforms and impacts on customers are discussed in the TSS¹⁸ in sections 14 and 15.7, and further in section 9 (for standard control services) and section 12 (for alternative control services).

¹⁸ TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

5 Standard control services – pricing proposal requirements

‘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, rather than actually setting prices. The AER classifies the generic distribution network services which are relied on by all customers, including connections to our distribution network, as standard control services.

5.1 Total revenue allowance

The annual revenue allowance which applies to our standard control services is recovered through general network charges (via network tariffs). Most of our revenue is earned through network tariffs and the amount of that revenue each year is capped by the AER. Retailers use our network tariffs as an input to their customers’ electricity bills.

5.2 Setting the 2018-19 network tariffs

This section provides an overview of how the total allowable revenue for standard control services is to be recovered through TasNetworks’ network tariffs.

5.2.1 Total allowable revenue and revenue cap

The 2017-18 network tariffs and charging parameters set out in this Annual Distribution Pricing Proposal are based on the Total Allowable Revenue (**TAR**) set by the AER in its distribution determination for TasNetworks¹⁹, plus any AER approved adjustments from prior periods (the **Revenue Cap**).

TasNetworks’ TAR is calculated in accordance with the following formula, which was prescribed by the AER in its distribution determination for TasNetworks:

Table 13 Revenue cap formula

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

Where:

TAR_t is the total allowable revenue in year t.

p^{ij}_t is the price of component ‘j’ of tariff ‘i’ in year t.

q^{ij}_t is the forecast quantity of component ‘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 year t.

¹⁹ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

- I_t is the final carryover amount from the application of the demand management incentive scheme (DMIS) from the 2012–17 regulatory control period. This amount will be calculated using the method set out in the DMIS and will be deducted from/added to allowed revenue in the 2018–19 pricing proposal.
- B_t is the sum of the following annual adjustment factors for year t:
- any under or over recovery of actual revenue collected through DUoS charges; and
 - any under or over recovery of the Electrical Safety Inspection Service charge, calculated using the following method:

Table 14 Electrical Safety Inspection Service Charge

| Electrical Safety Inspection Service Charge |
|---|
| $ESISC_t = (ESISC_{q_{t-1}} - ESISC_{e_{t-1}}) \times WACC_t$ |

where:

- $ESISC_{a_{t-1}}$ is the actual Electrical Safety Inspection Service charge for year t–1.
- $ESISC_{e_{t-1}}$ is the estimated Electrical Safety Inspection Service charge for year t–1 as determined by the AER.
- $WACC_t$ is the approved nominal weighted average cost of capital (WACC) for the relevant regulatory year using the following method:

Table 15 Nominal vanilla WACC

| Nominal vanilla WACC _t |
|--|
| $Nominal\ vanilla\ WACC_t = ((1 + real\ vanilla\ WACC_t) \times (1 + \Delta CPI_t)) - 1$ |

where the *real vanilla WACC_t* is as set out in our final decision PTRM and updated annually.

- any under or over recovery of the National Energy Market charge, calculated used the following method:

Table 16 National Energy Market Charge

| National Energy Market Charge |
|--|
| $NEMC_t = (NEMC_{q_{t-1}} - NEMC_{e_{t-1}}) \times WACC_t$ |

where:

- $NEMC_{a_{t-1}}$ is the actual National Energy Market charge for year t–1.
- $NEMC_{e_{t-1}}$ is the estimated National Energy Market charge for year t–1 as determined by the AER.
- $WACC_t$ is the approved nominal weighted average cost of capital (WACC) for the relevant regulatory year as calculated above.
- 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.
- 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 2017-19 regulatory control period as determined by the AER in the PTRM, and annually revised by the AER.

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) in the 2012–17 regulatory control period consistent with the AER’s STPIS.

Table 17 provides details of the Revenue Cap calculation that TasNetworks has utilised in the preparation of its network tariffs.

Table 17 Total allowable revenue

| Criteria | 2018 value (\$m) |
|---|------------------|
| AAR_{t-1} | 237.764 |
| ΔCPI_t | 4.539 |
| X_t | (0.552) |
| S_t | 8.139 |
| $AAR_t = AAR_{t-1}(1 + \Delta CPI_t)(1 - X_t)(1 + S_t)$ | 249.890 |
| I_t | (0.123) |
| B_t | (6.273) |
| C_t | 0.000 |
| $TAR_t = AAR_t + I_t + B_t + C_t$ | 243.495 |

5.2.2 Tariff development

The first stage of the network tariff development process is to allocate or assign network costs to the supply categories and, ultimately, the customer classes that utilise those assets, in an efficient and cost reflective way. TasNetworks allocates costs to customer classes and tariff classes using its Total Efficient Cost (TEC) model. This modelling process is explained in the paper ‘TEC Methodology’ provided as an attachment to this Annual Distribution Pricing Proposal.

5.2.3 Energy consumption, demand and customer forecasts

TasNetworks has prepared forecasts for demand, energy consumption and customer numbers as a component of its network tariff development modelling.

5.2.3.1 Energy consumption

TasNetworks’ consumption forecasting takes into account recent consumption trends and forecast growth within each customer class. Recent years have seen a stabilisation in consumption. As a result, the energy consumption forecasts which underpin this Annual Distribution Pricing Proposal anticipate an increase in consumption, bringing the forecast in line with recent trends.

The 2018-19 energy consumption forecast is for a total consumption of 4,196 GWh. This forecast is 2.44 per cent higher than TasNetworks’ forecast for its 2017-18 Annual Distribution Pricing Proposal.

5.2.3.2 Demand

The demand forecasts prepared by TasNetworks as part of its Annual Planning Report (APR) are not the same as the forecasts used by TasNetworks when developing network tariffs. This is because the APR draws on coincident maximum demand (system maximum demand, inclusive of transmission customer demand), whereas the setting of network tariffs is informed by any-time maximum demand (ATMD) on the distribution network only. The sum of ATMD will not equal the system maximum demand, as the individual demands within the ATMD do not all occur at the same time as the system maximum demand.

TasNetworks has also assumed that the largest customers that have charges based on a specified demand will set that specified demand such that they will minimise excess demand charges.

5.2.3.3 Customers

The forecasts of customer numbers developed for this Annual Distribution Pricing Proposal have been prepared on a tariff-by-tariff basis. As some of TasNetworks' customers may be supplied under multiple network tariffs, the aggregate number of 'customers' used to develop TasNetworks' pricing will be greater than the number of customers that are actually connected to the distribution network.

5.3 DUoS unders and overs

As a requirement of its distribution determination for TasNetworks²⁰, the AER requires us to provide a DUoS unders and overs account for the most recently completed regulatory year.

Attachment PP007 to this Annual Distribution Pricing Proposal 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.

5.4 Side constraints

Clause 6.18.6(b) of the Rules requires that, within a given regulatory control period, the revenue raised from a particular tariff class through tariffs applying to standard control services must not increase from year to year by more than the permissible percentages set out in the Rules. This limitation on tariffs and the revenue they can recover is referred to as a side constraint.

In accordance with the AER's distribution determination²¹, the following formula is to be used to determine side constraints for each tariff class:

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

where each tariff class "n", with each up to "m" components, and where:

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

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

q_t^{ij} is the forecast quantity of component 'j' of the tariff class in year t.

²⁰ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

²¹ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 14 – Control mechanisms – April 2017

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 2017-19 regulatory control period as determined in the PTRM and annually revised for the return on debt update. If $X > 0$, then 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 2012–17 regulatory control period consistent with the AER's STPIS.

I'_t is the percentage change from the final carryover amount from the application of the DMIS from the 2012–17 regulatory control period. This amount will be calculated using the method set out in the DMIS and will be deducted from/added to allowed revenue in the 2018–19 pricing proposal.

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

- any under or over recovery of actual revenue collected through DUoS charges calculated using the method approved by the AER.
- any under or over recovery of Electrical Safety Inspection Service charge, calculated using the method approved by the AER in Table 14.
- Any under or over recovery of the National Energy Market charge, calculated using the method in Table 16.

C'_t is the annual percentage change from the sum of approved cost pass through amount (positive or negative) with respect to 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).

Table 18 Side constraint compliance 2018-19

| Tariff class | Weighted average revenue 2017-18 (\$m) | Anticipated revenue 2018-19 (\$m) | % change (calculated) | % change (allowed by side constraint) |
|---------------------|--|-----------------------------------|-----------------------|---------------------------------------|
| ITC | 1.092 | 1.088 | (0.4%) | 4.5% |
| High Voltage | 6.914 | 7.031 | 1.7% | 4.5% |
| Irrigation | 6.432 | 6.567 | 2.1% | 4.5% |
| Large Low Voltage | 19.463 | 19.835 | 1.9% | 4.5% |
| Small Low Voltage | 54.577 | 55.663 | 2.0% | 4.5% |
| Residential | 113.487 | 115.782 | 2.0% | 4.5% |
| Uncontrolled Energy | 31.752 | 33.149 | 4.4% | 4.5% |
| Controlled Energy | 1.424 | 1.482 | 4.1% | 4.5% |
| Unmetered | 0.979 | 0.994 | 1.5% | 4.5% |
| Street Lighting | 1.558 | 1.577 | 1.2% | 4.5% |

5.4.1 Weighted average revenue

Clause 6.18.2(b)(4) of the Rules require TasNetworks to 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.

Table 19 sets out the expected weighted average of revenue for 2017-18 and 2018-19.

Table 19 Weighted average revenue

| Tariff class | Weighted average revenue 2017-18 (\$m) | Anticipated revenue 2018-19 (\$m) | Change (%) |
|---------------------|--|-----------------------------------|------------|
| ITC | 4.864 | 4.816 | (1.0%) |
| High Voltage | 12.169 | 12.012 | (1.3%) |
| Irrigation | 7.965 | 7.957 | (0.1%) |
| Large Low Voltage | 31.219 | 30.438 | (2.5%) |
| Small Low Voltage | 74.462 | 72.909 | (2.1%) |
| Residential | 139.436 | 138.457 | (0.7%) |
| Uncontrolled Energy | 56.668 | 54.895 | (3.1%) |
| Controlled Energy | 1.767 | 1.802 | 2.0% |
| Unmetered | 1.203 | 1.194 | (0.7%) |
| Street Lighting | 2.128 | 2.109 | (0.9%) |

5.5 2018-19 pricing and indicative prices provided in the TSS

Our TSS²² outlines the assumptions we used to forecast indicative network use of system (NUoS) prices. These assumptions have changed from our TSS²² to our actual proposed 2018-19 NUoS prices. The differences between our indicative 2018-19 NUoS prices and our pricing proposal prices are predominately driven by changes to total allowable revenue (as identified in Table 20) including:

- a higher maximum allowed revenue;
- confirmation of the s-factor outcome; and
- previous years over-recoveries (for both DUoS and TUoS).

Table 20 Changes in assumptions for indicative pricing to pricing proposal

| Assumptions | TSS (\$m) | Pricing Proposal (\$m) | Variance (\$m) |
|-------------------------|-----------|------------------------|----------------|
| Annual Smoothed Revenue | 231.840 | 237.764 | 5.924 |
| ΔCPI_t | 0.000 | 4.539 | 4.539 |
| X_t | 0.000 | (0.552) | (0.552) |
| S-Factor | 0.000 | 8.139 | 8.139 |

²² TasNetworks Tariff Structure Statement – Formal Statement – April 2017
TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

| Assumptions | TSS (\$m) | Pricing Proposal (\$m) | Variance (\$m) |
|------------------------------|-----------|------------------------|----------------|
| I-Factor | 0.000 | (0.123) | (0.123) |
| B-Factor | 0.000 | (6.273) | (6.273) |
| C-Factor | 0.000 | 0.000 | 0.000 |
| Charges paid to TNSP | 95.543 | 86.460 | (9.083) |
| TUOS Unders and overs amount | 0.000 | (3.560) | (3.560) |

In addition, refinements to our demand and consumption forecasts for 2018-19 have flowed through to NUoS prices.

In 2018-19 we are offering two new demand-based time of use tariffs designed for residential and small business customers that deploy distributed energy technologies, such as solar panels and battery storage, which are opt-in only. These two tariffs will be available from 1 December 2018.

Initially, both tariffs will be offered on a discounted basis (50 per cent reduction to the off-peak rate), to provide economically-justified incentives to encourage take-up of the new tariffs on an opt-in basis. We are applying the same discounting arrangements to the time of use demand based tariffs introduced in 2017 to further incentivise their uptake as well. With the goal of cost reflectivity in mind, the discounts will be offered on a transitional basis only and will decline progressively over the course of the 2019-24 period, to the point that no discount will be offered from 1 July 2024.

We are funding the discount cost directly (estimated to be \$0.023 million in 2018-19), so the cost of the discount will not be passed onto other customers.

Further information on these tariffs is included in section 5.7.

We are constantly refining our tariffs with increased data we are gaining access to. We are currently undertaking a network tariff trial to support our tariff strategy development and implementation. During the trial we have engaged with customers, rolled out advanced meters and started collecting data. This data is allowing us to further refine our tariffs and, as a result, we have made adjustments to our tariffs for Residential time of use demand (TAS87), Residential low voltage pay as you go time of use (TAS92), Residential low voltage time of use (TAS93), and Residential low voltage pay as you go (TAS101).

5.6 National Electricity Rules and applicable regulatory instruments

Clause 6.18.5(j) of the Rules requires that a tariff must comply with the Rules and all applicable regulatory instruments. Section 15.7 of our TSS²³ notes that we have departed from two of the principles:

- the revenue from each tariff must reflect the total efficient cost of servicing the customers assigned to that tariff; and
- the need for tariffs to have regard to the extent to which costs vary between different locations on our network.

These departures are necessary to manage the impact on customers from annual changes in network tariffs and to comply with the Rules that apply specifically to Tasmania.

For further information on this refer to section 15.7 of our TSS²³.

²³ TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

5.7 Sub-threshold tariffs

Included in our proposed TSS (2019-2024), we are introducing two new demand based time of use tariffs to give households and small businesses who invest in distributed energy resources (DER) new opportunities to control their electricity costs.

Clause 6.18.1C(a) of the Rules requires 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 tariff (a relevant tariff) that is determined otherwise than in accordance with the DNSP's current TSS if both the following are satisfied:

- (1) The DNSP'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 DNSP's annual revenue requirement for that regulatory year (the individual threshold); and
- (2) The DNSP 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 1 per cent of the DNSP's annual revenue requirement for that regulatory year (the cumulative threshold)

As displayed in Table 21 below, the new proposed tariffs satisfy clauses 6.18.1C (a) (1) & (2) of the Rules. The revenue to be recovered from the proposed new tariffs is less than the individual threshold and the cumulative threshold.

TasNetworks advised the AER of our intention to offer these new tariffs on 31 January 2018.

Retailers have been previously notified of our intention to offer these tariffs through our consultation process for our regulatory proposal for 2019-2024 through our pricing reform working group (PRWG). We have published the PRWG materials and consultation documents on our website.²⁴

These tariffs are opt-in therefore no customers are impacted by the proposed new tariffs. Members of the PRWG, which include electricity retailers, customer advocacy groups, business associations and energy advisors, have been notified of the new proposed tariffs.

Table 21 Compliance with Rules clauses 6.18.1C (a) (1) & (2)

| Tariff | Anticipated tariff revenue 2018-19 (\$m) | Anticipated revenue 2018-19 (\$m) | Percentage of Revenue (%) | Threshold (%) |
|--------------|--|---|---------------------------------|------------------|
| TAS97 | 0.016 | 326.393 | 0.0% | 0.5% |
| TAS98 | 0.004 | 326.393 | 0.0% | 0.5% |
| Total | 0.028 | 326.393 | 0.0% | 1.0% |

Clause 6.18.1C (b) of the Rules states that notwithstanding any other provision in the Rules to the contrary, a relevant tariff notified by the Distribution Network Service Provider in accordance with paragraph (a) is, for the remainder of the regulatory control period in which the notification is given:

- (1) not required to comply with the pricing principles for direct control services; and

²⁴ <https://www.tasnetworks.com.au/customer-engagement/tariff-reform/>

- (2) for the purposes of the submission and approval of a pricing proposal, deemed to comply with the Distribution Network Service Provider's current tariff structure statement,

unless, at any point in time after the notification of the relevant tariff is given under paragraph (a) (the post-notification point), either the individual threshold or the cumulative threshold (in each case calculated using actual rather than forecast revenue) are exceeded by virtue of the amount of revenue that is attributable to the relevant tariff, in which case sub-paragraphs (1) and (2) cease to apply to the relevant tariff in relation to the regulatory years that commence after the post-notification point.

We are intending to introduce the new proposed DER tariffs from 1 December 2018. Actual revenue is not yet available and our forecast revenue is within the thresholds for clauses 6.18.1C (a) (1) & (2) of the Rules, therefore sub-paragraphs (b) (1) and (2) continue to apply for the new proposed DER tariffs .

Clause 6.18.1C (c) of the Rules state where sub-paragraphs (b)(1) and (2) cease to apply to a relevant tariff in accordance with paragraph (b), then sub-paragraphs (b)(1) and (2) will be taken to continue to apply to other relevant tariffs that were notified before the post-notification point, but only to the extent that those sub-paragraphs would apply if the first-mentioned relevant tariff were not a relevant tariff.

Noted above sub-paragraph (b) (1) and (2) continues to apply, therefore (c) doesn't apply.

As noted in section 5.5 above, initially both tariffs will be offered on a discounted basis (50 per cent reduction to the off-peak rate), to provide economically-justified incentives to encourage take-up of the new tariffs on an opt-in basis. With the goal of cost reflectivity in mind, the discounts will be offered on a transitional basis only and will decline progressively over the course of the 2019-24 period, to the point that no discount will be offered from 1 July 2024.

We are funding the discount cost directly (estimated to be \$0.023 million in 2018-19), so the cost of the discount will not be passed onto other customers.

6 Transmission charges

6.1 TUoS expenses

6.1.1 Transmission charges

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.

TasNetworks' distribution network is connected to the transmission network at multiple connection points within Tasmania, as are a number of other customers. As the operator of the transmission network, TasNetworks recovers its allowable revenue through the transmission charges levied on the distribution network, as well as the other customers connected directly to the transmission network.

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.

6.1.2 Standard transmission charges

A number of customers, or groups of customers, may have specially calculated network tariffs. As part of these network tariffs there will be a pass-through of the transmission charges arising from each customer's share of the load on the transmission system. These nodal connection charges are based upon demand, and vary according to the terminal substation to which the customer is connected.

6.1.3 Avoided TUoS

The Rules require TasNetworks to pay avoided TUoS usage 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.

In accordance with the Rules, 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 shall:

- (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.

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 has, therefore, been assigned to all tariff classes.

6.2 TUoS receipts

6.3 Tariff recovery of TUoS

A description of how TUoS is recovered through TasNetworks' standard control network tariffs is given in section 3.3.2.

6.4 Designated pricing proposal charges unders and overs account

Clause 6.18.2(b)(6) of the Rules requires us to provide a designated pricing proposal charges (DPPC) unders and overs account for the most recently completed regulatory year. Attachment PP007 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.

7 Standard control services – customer price impacts

7.1 Price movements in 2018-19

TasNetworks' tariff strategy recognises the changing expectations of customers and the upward pressure exerted on energy prices in recent years. As a business TasNetworks is committed to achieving a commercial outcome that strikes a balance between meeting the requirements of customers and managing sustainability and risk.

Table 22 provides the difference in the charges between 2017-18 and 2018-19 for each network tariff component.

Table 22 Network tariff classes – percentage price change

| Network tariff class | Network tariff | Network tariff component | Charge 2017-18 (cents) | Charge 2018-19 (cents) | Change (%) |
|----------------------|----------------|------------------------------------|------------------------|------------------------|------------|
| High Voltage | TAS15 | Service charge | 2,543.800 | 2,633.000 | 3.5% |
| | | Peak energy | 0.998 | 0.946 | (5.2%) |
| | | Shoulder energy | 0.599 | 0.568 | (5.2%) |
| | | Off-peak energy | 0.149 | 0.142 | (4.7%) |
| | | Specified demand | 8.351 | 8.668 | 3.8% |
| | | Excess demand | 41.755 | 43.339 | 3.8% |
| | | Connection specified demand | 0.303 | 0.315 | 4.0% |
| | | Excess connection specified demand | 1.516 | 1.573 | 3.8% |
| | TASSDM | Service charge | 280.685 | 320.754 | 14.3% |
| | | Peak energy | 1.463 | 1.358 | (7.2%) |
| | | Shoulder energy | 0.878 | 0.816 | (7.1%) |
| | | Off-peak energy | 0.219 | 0.204 | (6.8%) |
| | | Specified demand | 18.755 | 18.672 | (0.4%) |
| | | Excess demand | 187.552 | 186.721 | (0.4%) |
| Irrigation | TAS75 | Service charge | 230.294 | 237.692 | 3.2% |
| | | Peak energy | 10.365 | 10.075 | (2.8%) |
| | | Shoulder energy | 6.219 | 6.045 | (2.8%) |
| | | Off-peak energy | 1.555 | 1.511 | (2.8%) |
| Large Low Voltage | TAS82 | Service charge | 285.917 | 317.685 | 11.1% |
| | | Energy charge | 2.486 | 2.428 | (2.3%) |
| | | Demand charge | 34.721 | 33.514 | (3.5%) |
| | TAS89 | Service charge | 427.103 | 447.529 | 4.8% |
| | | Peak demand | 51.484 | 45.321 | (12.0%) |
| | | Off-peak demand | 17.143 | 15.092 | (12.0%) |

| Network tariff class | Network tariff | Network tariff component | Charge 2017-18 (cents) | Charge 2018-19 (cents) | Change (%) |
|----------------------|-----------------|-------------------------------|------------------------|------------------------|------------|
| Small Low Voltage | TAS22 | Service charge | 48.180 | 49.381 | 2.5% |
| | | Energy charge | 10.031 | 9.765 | (2.7%) |
| | TAS34 | Service charge | 48.180 | 49.381 | 2.5% |
| | | 1 st 500kWh energy | 10.031 | 9.765 | (2.7%) |
| | | Remaining energy | 9.642 | 9.765 | 1.3% |
| | TASCURT | Service charge | 40.472 | 43.359 | 7.1% |
| | | Energy charge | 10.031 | 9.765 | (2.7%) |
| | TAS88 | Service charge | 64.926 | 71.839 | 10.6% |
| | | Peak demand | 58.432 | 54.430 | (6.8%) |
| | | Off-peak demand | 19.459 | 18.125 ²⁵ | (6.9%) |
| | TAS94 | Service charge | 57.368 | 64.953 | 13.2% |
| | | Peak energy | 10.700 | 10.384 | (3.0%) |
| | | Shoulder energy | 6.422 | 6.232 | (3.0%) |
| | | Off-peak energy | 1.605 | 1.558 | (2.9%) |
| | TAS98 | Service charge | n.a. | 71.839 | n.a. |
| | | Peak demand | n.a. | 58.404 | n.a. |
| | | Off-peak demand | n.a. | 19.448 ²⁵ | n.a. |
| | Residential | TAS31 | Service charge | 47.864 | 49.663 |
| Energy charge | | | 10.152 | 9.857 | (2.9%) |
| TAS101 | | Service charge | 47.864 | 50.069 | 4.6% |
| | | Energy charge | 7.917 | 7.861 | (0.7%) |
| TAS87 | | Service charge | 54.538 | 55.245 | 1.3% |
| | | Peak demand | 36.228 | 25.727 | (29.0%) |
| | | Off-peak demand | 12.064 | 8.567 ²⁵ | (29.0%) |
| TAS93 / TAS92 | | Service charge | 53.581 | 54.294 | 1.3% |
| | | Peak energy | 17.679 | 16.717 | (5.4%) |
| | | Off-peak energy | 3.090 | 3.013 | (2.5%) |
| TAS97 | | Service charge | n.a. | 55.245 | n.a. |
| | | Peak demand | n.a. | 28.439 | n.a. |
| | Off-peak demand | n.a. | 9.471 ²⁵ | n.a. | |
| Uncontrolled Energy | TAS41 | Service charge | 5.538 | 6.137 | 10.8% |
| | | Energy charge | 5.806 | 5.559 | (4.3%) |

²⁵ Does not include 50 per cent incentive applicable from 1 December 2018

| Network tariff class | Network tariff | Network tariff component | Charge 2017-18 (cents) | Charge 2018-19 (cents) | Change (%) |
|----------------------|----------------|--------------------------|------------------------|------------------------|------------|
| Controlled Energy | TAS61 | Service charge | 11.252 | 11.693 | 3.9% |
| | | Energy charge | 1.692 | 1.690 | (0.1%) |
| | TAS63 | Service charge | 11.252 | 11.693 | 3.9% |
| | | Energy charge | 1.467 | 1.467 | 0.0% |
| Unmetered | TASUMS | Service charge | 48.180 | 49.381 | 2.5% |
| | | Energy charge | 11.951 | 11.601 | (2.9%) |
| Street Lighting | TASUMSSL | Demand charge | 0.112 | 0.111 | (0.9%) |

Table 23 provides the difference in the charges between 2017-18 and 2018-19 for each ITC²⁶ network tariff component.

Table 23 ITC tariffs – percentage price change

| Network tariff class | NMI / Tariff | Network tariff component | DUoS charge 2017-18 (cents) | DUoS charge 2018-19 (cents) | Change (%) | |
|-------------------------------|-------------------------------|-------------------------------|-----------------------------|-----------------------------|------------|------|
| Individual Tariff Calculation | Individual Tariff Calculation | Service charge | ██████ | ██████ | ████ | |
| | | Specified connection | ████ | ████ | ████ | |
| | | Excess connection | ████ | ████ | ████ | |
| | Individual Tariff Calculation | Individual Tariff Calculation | Service charge | ██████ | ██████ | ████ |
| | | | Energy charge | ████ | ████ | ████ |
| | | | Specified connection | ████ | ████ | ████ |
| | | | Excess connection | ████ | ████ | ████ |
| | | | Specified demand | ████ | ████ | ████ |
| | | | Excess demand | ████ | ████ | ████ |
| | Individual Tariff Calculation | Individual Tariff Calculation | Service charge | ██████ | ██████ | ████ |
| | | | Energy charge | ████ | ████ | ████ |
| | | | Specified connection | ████ | ████ | ████ |
| Excess connection | | | ████ | ████ | ████ | |
| Specified demand | | | ████ | ████ | ████ | |
| Excess demand | | | ████ | ████ | ████ | |

²⁶ ITC network tariff rates are confidential.

| Network tariff class | NMI / Tariff | Network tariff component | DUoS charge 2017-18 (cents) | DUoS charge 2018-19 (cents) | Change (%) |
|-------------------------------|-------------------------------|--------------------------|-----------------------------|-----------------------------|------------|
| Individual Tariff Calculation | Individual Tariff Calculation | Service charge | ██████ | ██████ | ██ |
| | | Energy charge | ████ | ████ | ████ |
| | | Specified connection | ████ | ████ | ████ |
| | | Excess connection | ████ | ████ | ████ |
| | | Specified demand | ████ | ████ | ████ |
| | | Excess demand | ████ | ████ | ████ |
| | Individual Tariff Calculation | Service charge | ██████ | ██████ | ██ |
| | | Energy charge | ████ | ████ | ████ |
| | | Specified connection | ████ | ████ | ████ |
| | | Excess connection | ████ | ████ | ████ |
| | | Specified demand | ████ | ████ | ████ |
| | | Excess demand | ████ | ████ | ████ |
| | Individual Tariff Calculation | Service charge | ██████ | ██████ | ██ |
| | | Peak energy | ████ | ████ | ████ |
| | | Shoulder energy | ████ | ████ | ████ |
| | | Off-peak energy | ████ | ████ | ████ |
| | | Specified connection | ████ | ████ | ████ |
| | | Excess connection | ████ | ████ | ████ |
| | | Specified demand | ████ | ████ | ████ |
| | | Excess demand | ████ | ████ | ████ |
| | Individual Tariff Calculation | Service charge | ██████ | ██████ | ██ |
| | | Peak energy | ████ | ████ | ████ |
| | | Shoulder energy | ████ | ████ | ████ |
| | | Off-peak energy | ████ | ████ | ████ |
| Specified demand | | ████ | ████ | ████ | |
| Excess demand | | ████ | ████ | ████ | |
| Individual Tariff Calculation | Service charge | ██████ | ██████ | ██ | |
| | Peak energy | ████ | ████ | ████ | |
| | Shoulder energy | ████ | ████ | ████ | |
| | Off-peak energy | ████ | ████ | ████ | |
| | Specified demand | ████ | ████ | ████ | |
| | Excess demand | ████ | ████ | ████ | |
| High Voltage | TAS15 | Service charge | 2,543.800 | 2,633.000 | 3.5% |
| | | Peak energy | 0.998 | 0.946 | (5.2%) |
| | | Shoulder energy | 0.599 | 0.568 | (5.2%) |

| Network tariff class | NMI / Tariff | Network tariff component | DUoS charge 2017-18 (cents) | DUoS charge 2018-19 (cents) | Change (%) |
|----------------------|--------------|--------------------------|-----------------------------|-----------------------------|------------|
| | | Off-peak energy | 0.149 | 0.142 | (4.7%) |
| | | Specified demand | 8.351 | 8.668 | 3.8% |
| | | Excess demand | 41.755 | 43.339 | 3.8% |
| | | Specified connection | 0.303 | 0.315 | 4.0% |
| | | Excess connection | 1.516 | 1.573 | 3.8% |

Table 24 provides the difference in the charges between 2017-18 and 2018-19 for each locational TUoS charge.

Table 24 Locational TUoS charges – percentage price change

| Transmission node description | Transmission node identifier | TUoS charge 2017-18 (c/kVA/day) | TUoS charge 2018-19 (c/kVA/day) | Change (%) |
|-------------------------------|------------------------------|---------------------------------|---------------------------------|------------|
| Arthurs Lake | TAL2 | 17.768 | 17.451 | (1.8%) |
| Avoca | TAV2 | 17.655 | 21.513 | 21.9% |
| Burnie | TBU3 | 16.113 | 15.347 | (4.8%) |
| Bridgewater | TBW2 | 17.556 | 16.738 | (4.7%) |
| Derwent Bridge | TDB2 | 184.649 | 185.741 | 0.6% |
| Derby | TDE2 | 41.898 | 36.957 | (11.8%) |
| Devonport | TDP2 | 18.135 | 17.926 | (1.2%) |
| Emu Bay | TEB2 | 21.582 | 21.118 | (2.1%) |
| Electrona | TEL2 | 25.401 | 20.332 | (20.0%) |
| Huon River | THR2 | 45.384 | 89.381 | 96.9% |
| Kermantie | TKE2 | 34.091 | 34.270 | 0.5% |
| Kingston 11kV | TKI2 | 18.483 | 17.896 | (3.2%) |
| Kingston 33kV | TKI3 | 22.464 | 19.396 | (13.7%) |
| Knights Road | TKR2 | 23.866 | 23.038 | (3.5%) |
| Lindisfarne | TLF2 | 17.661 | 15.445 | (12.5%) |
| Meadowbank | TMB2 | 18.134 | 15.998 | (11.8%) |
| New Norfolk | TNN2 | 19.691 | 18.836 | (4.3%) |
| Newton | TNT2 | 44.174 | 44.204 | 0.1% |
| Port Latta | TPL2 | 21.131 | 18.405 | (12.9%) |
| Palmerston | TPM3 | 18.460 | 16.976 | (8.0%) |
| Queenstown | TQT2 | 29.574 | 29.997 | 1.4% |
| Railton | TRA2 | 17.837 | 17.297 | (3.0%) |
| Rosebery | TRB2 | 16.243 | 15.737 | (3.1%) |
| Scottsdale | TSD2 | 40.708 | 38.753 | (4.8%) |

| Transmission node description | Transmission node identifier | TUoS charge 2017-18 (c/kVA/day) | TUoS charge 2018-19 (c/kVA/day) | Change (%) |
|-------------------------------|------------------------------|---------------------------------|---------------------------------|------------|
| St Marys | TSM2 | 26.025 | 25.422 | (2.3%) |
| Sorell | TSO2 | 22.410 | 21.672 | (3.3%) |
| Savage River | TSR2 | 17.190 | 12.004 | (30.2%) |
| Smithton | TST2 | 25.604 | 24.295 | (5.1%) |
| Triabunna | TTB2 | 32.480 | 29.715 | (8.5%) |
| Tungatinah | TTU2 | 58.553 | 62.284 | 6.4% |
| Ulverstone | TUL2 | 17.651 | 17.069 | (3.3%) |
| Waddamana | TWA2 | 31.681 | 36.008 | 13.7% |
| Wesley Vale | TWV2 | 629.713 ¹ | 9.648 | (98.5%) |
| Hobart Virtual | TVN1 | 17.991 | 17.194 | (4.4%) |
| Tamar Virtual | TVN2 | 15.190 | 15.121 | (0.5%) |

- 1 The large decline for Wesley Vale reflects the contract demand for this connection increasing from 100 kW in 2017-18 to 12 MW for 2018-19 after work is completed to change the supply voltage from 11 kV to 22 kV. The transmission charge for this connection did not reduce proportionately with the contract demand as the connection charge is the largest component (about 87% in 2016-17).

8 Standard control services pricing

The proposed DUoS charges for each of TasNetworks' network tariffs in 2018-19 are outlined in Table 25.

The proposed DUoS charges for each of TasNetworks' 2017-18 individual tariff calculation²⁷ customers and business high voltage kVA specified demand (> 2 MVA) network tariffs are outlined in Table 26.

The proposed TUoS charges for each of TasNetworks' 2017-18 network tariffs are outlined in Table 27.

The proposed TUoS charges for each of TasNetworks' 2017-18 individual tariff calculation²⁸ and business high voltage kVA specified demand (> 2 MVA) network tariffs are outlined in Table 28.

The proposed locational TUoS charges that are applicable to TasNetworks' 2018-19 ITC and business high voltage kVA specified demand (> 2 MVA) network tariffs are outlined in Table 29.

²⁷ ITC network tariff rates are confidential.

²⁸ ITC network tariff rates are confidential.

Table 25 DUoS charges – standard control services

| Distribution Use of System rates | | | | | | | | | | | | |
|---|---------------------|--------------------|-----------------------|----------|----------|-------------------------|-----------|---------------------------------------|--------|---------------------|----------------------------|---------|
| Network tariff description | Network tariff code | Daily charge c/day | ToU energy rate c/kWh | | | Step energy rates c/kWh | | Demand rates c/kVA, kW, lamp watt/day | | | Capacity charges c/kVA/day | |
| | | | Peak | Shoulder | Off-peak | Step 1 | Remaining | Day | Peak | Off-peak | Specified | Excess |
| Business high voltage kVA specified demand | TASSDM | 320.754 | 0.309 | 0.185 | 0.046 | | | | | | 14.978 | 149.779 |
| Business high voltage kVA specified demand (> 2MVA) | TAS15 | 2,633.000 | 0.946 | 0.568 | 0.142 | | | | | | 8.668 | 43.339 |
| Irrigation low voltage time of use | TAS75 | 237.692 | 6.792 | 4.076 | 1.019 | | | | | | | |
| Business low voltage kVA demand | TAS82 | 317.685 | | | | 1.738 | | 19.229 | | | | |
| Business low voltage time of use kVA demand large | TAS89 | 447.529 | | | | | | | 25.496 | 8.490 | | |
| Business low voltage general | TAS22 | 49.381 | | | | 7.357 | | | | | | |
| Business low voltage nursing homes | TAS34 | 49.381 | | | | 7.357 | 7.357 | | | | | |
| General network – business, curtilage | TASCURT | 43.359 | | | | 7.357 | | | | | | |
| Business low voltage time of use | TAS94 | 64.953 | 7.520 | 4.513 | 1.128 | | | | | | | |
| Business low voltage time of use kW demand | TAS88 | 71.839 | | | | | | | 41.253 | 13.737 ³ | | |
| Business low voltage distributed energy resources | TAS98 | 71.839 | | | | | | | 44.265 | 14.740 ³ | | |
| Residential low voltage general | TAS31 | 49.663 | | | | 7.449 | | | | | | |
| Residential low voltage pay as you go | TAS101 | 50.069 | | | | 6.161 | | | | | | |
| Residential low voltage pay as you go time of use | TAS92 | 54.294 | 12.177 | | 2.194 | | | | | | | |
| Residential low voltage time of use | TAS93 | 54.294 | 12.177 | | 2.194 | | | | | | | |
| Residential time of use kW demand | TAS87 | 55.245 | | | | | | | 20.042 | 6.674 ³ | | |

| Distribution Use of System rates | | | | | | | | | | | | | |
|---|---------------------|--------------------|-----------------------|----------|----------|-------------------------|-----------|---------------------------------------|------|----------|----------------------------|--------|--|
| Network tariff description | Network tariff code | Daily charge c/day | ToU energy rate c/kWh | | | Step energy rates c/kWh | | Demand rates c/kVA, kW, lamp watt/day | | | Capacity charges c/kVA/day | | |
| | | | Peak | Shoulder | Off-peak | Step 1 | Remaining | Day | Peak | Off-peak | Specified | Excess | |
| Residential low voltage distributed energy resources | TAS97 | 55.245 | | | | | | | | 22.155 | 7.378 ³ | | |
| Uncontrolled low voltage heating | TAS41 | 6.137 | | | | 3.151 | | | | | | | |
| Controlled low voltage energy off-peak with afternoon boost | TAS61 | 11.693 | | | | 1.050 | | | | | | | |
| Controlled low voltage energy with night period only | TAS63 | 11.693 | | | | 0.953 | | | | | | | |
| Unmetered supply low voltage general | TASUMS | 49.381 | | | | 8.240 | | | | | | | |
| Unmetered supply low voltage public lighting | TASUMSSL | | | | | | | 0.083 ² | | | | | |
| Residential low voltage import transitional ¹ | TASX1I | | | | | | | | | | | | |
| Business low voltage import transitional ¹ | TASX2I | | | | | | | | | | | | |
| Residential low voltage import fair and reasonable ¹ | TASX4I | | | | | | | | | | | | |
| Business low voltage import fair and reasonable ¹ | TASX5I | | | | | | | | | | | | |
| Non-qualifying import ¹ | TASX6I | | | | | | | | | | | | |

1 There are no charges for these network tariffs.

2 c/lamp watt/day

3 Does not include 50 per cent incentive applicable from 1 December 2018

Table 26 DUoS charges – standard control services (ITC customers)²⁹

| Distribution Use of System rates | | | | | | | | | | |
|----------------------------------|---------------------|---------------------|-------------------|----------|----------|------------|-----------------------------|--------|----------------------------|--------|
| Tariff description | Network Tariff code | Daily charge \$/day | Energy rate c/kWh | | | | Connection charge c/kVA/day | | Capacity charges c/kVA/day | |
| | | | Peak | Shoulder | Off-peak | All energy | Specified | Excess | Specified | Excess |
| Individual tariff calculation | TASCUS1 | ■ | | | | | ■ | ■ | | |
| Individual tariff calculation | TASCUS1 | ■ | | | | ■ | ■ | ■ | ■ | ■ |
| Individual tariff calculation | TASCUS1 | ■ | | | | ■ | ■ | ■ | ■ | ■ |
| Individual tariff calculation | TASCUS1 | ■ | | | | ■ | ■ | ■ | ■ | ■ |
| Individual tariff calculation | TASCUS1 | ■ | | | | ■ | ■ | ■ | ■ | ■ |
| Individual tariff calculation | TASCUS1 | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ |
| Individual tariff calculation | TASCUS3 | ■ | ■ | ■ | ■ | | | | ■ | ■ |
| Individual tariff calculation | TASCUS4 | ■ | ■ | ■ | ■ | | | | ■ | ■ |

²⁹ ITC network tariff rates are confidential.

Table 27 TUoS charges – standard control services

| Transmission Use of System rates | | | | | | | | | | | | |
|---|---------------------|--------------------|-----------------------|----------|----------|-------------------------|-----------|---------------------------------------|--------|--------------------|----------------------------|------------|
| Network tariff description | Network tariff code | Daily charge c/day | ToU energy rate c/kWh | | | Step energy rates c/kWh | | Demand rates c/kVA, kW, lamp watt/day | | | Capacity charges c/kVA/day | |
| | | | Peak | Shoulder | Off-peak | Step 1 | Remaining | Day | Peak | Off-peak | Specified | Excess |
| Business high voltage kVA specified demand | TASSDM | | 1.049 | 0.631 | 0.158 | | | | | | 3.694 | 36.942 |
| Business high voltage kVA specified demand (> 2MVA) | TAS15 | | | | | | | | | | Locational | Locational |
| Irrigation low voltage time of use | TAS75 | | 3.283 | 1.969 | 0.492 | | | | | | | |
| Business low voltage kVA demand | TAS82 | | | | | 0.690 | | 14.285 | | | | |
| Business low voltage time of use kVA demand large | TAS89 | | | | | | | | 19.825 | 6.602 | | |
| Business low voltage general | TAS22 | | | | | 2.408 | | | | | | |
| Business low voltage nursing homes | TAS34 | | | | | 2.408 | 2.408 | | | | | |
| General network – business, curtilage | TASCURT | | | | | 2.408 | | | | | | |
| Business low voltage time of use | TAS94 | | 2.864 | 1.719 | 0.430 | | | | | | | |
| Business low voltage time of use kW demand | TAS88 | | | | | | | | 13.177 | 4.388 ³ | | |
| Business low voltage distributed energy resources | TAS98 | | | | | | | | 14.139 | 4.708 ³ | | |
| Residential low voltage general | TAS31 | | | | | 2.408 | | | | | | |
| Residential low voltage pay as you go | TAS101 | | | | | 1.700 | | | | | | |
| Residential low voltage pay as you go time of use | TAS92 | | 4.540 | | 0.819 | | | | | | | |
| Residential low voltage time of use | TAS93 | | 4.540 | | 0.819 | | | | | | | |
| Residential time of use kW demand | TAS87 | | | | | | | | 5.685 | 1.893 ³ | | |

| Transmission Use of System rates | | | | | | | | | | | | |
|---|---------------------|--------------------|-----------------------|----------|----------|-------------------------|-----------|---------------------------------------|-------|--------------------|----------------------------|--------|
| Network tariff description | Network tariff code | Daily charge c/day | ToU energy rate c/kWh | | | Step energy rates c/kWh | | Demand rates c/kVA, kW, lamp watt/day | | | Capacity charges c/kVA/day | |
| | | | Peak | Shoulder | Off-peak | Step 1 | Remaining | Day | Peak | Off-peak | Specified | Excess |
| Residential low voltage distributed energy resources | TAS97 | | | | | | | | 6.284 | 2.093 ³ | | |
| Uncontrolled low voltage heating | TAS41 | | | | | 2.408 | | | | | | |
| Controlled low voltage energy off-peak with afternoon boost | TAS61 | | | | | 0.640 | | | | | | |
| Controlled low voltage energy with night period only | TAS63 | | | | | 0.514 | | | | | | |
| Unmetered supply low voltage general | TASUMS | | | | | 3.361 | | | | | | |
| Unmetered supply low voltage public lighting | TASUMSSL | | | | | | | 0.028 ² | | | | |
| Residential low voltage import transitional ¹ | TASX1I | | | | | | | | | | | |
| Business low voltage import transitional ¹ | TASX2I | | | | | | | | | | | |
| Residential low voltage import fair and reasonable ¹ | TASX4I | | | | | | | | | | | |
| Business low voltage import fair and reasonable ¹ | TASX5I | | | | | | | | | | | |
| Non-qualifying import ¹ | TASX6I | | | | | | | | | | | |

1 There are no charges for these tariffs.

2 c/Lamp watt/day

3 Does not include 50 per cent incentive applicable from 1 December 2018

Table 28 TUoS – standard control services (ITC customers)³⁰

| Transmission Use of System rates | | | | | | | | | | |
|----------------------------------|---------------------|--------------------|-----------------------|----------|----------|-------------------------|-----------|-----------------------------|----------------------------|------------|
| Tariff description | Network tariff code | Daily charge c/day | ToU energy rate c/kWh | | | Step energy rates c/kWh | | Demand rates c/kVA (kW)/day | Capacity charges c/kVA/day | |
| | | | Peak | Shoulder | Off-peak | Step 1 | Remaining | | Specified | Excess |
| Individual tariff calculation | TASCUS1 | | | | | | | | Locational | Locational |
| Individual tariff calculation | TASCUS3 | | | | | | | | Locational | Locational |
| Individual tariff calculation | TASCUS4 | | | | | | | | Locational | Locational |

³⁰ ITC network tariff rates are confidential.

Table 29 Locational TUoS charges – standard control services

| Transmission node description | Transmission node identifier | Daily charge c/kVA/day |
|-------------------------------|------------------------------|------------------------|
| Arthurs Lake | TAL2 | 17.451 |
| Avoca | TAV2 | 21.513 |
| Burnie | TBU3 | 15.347 |
| Bridgewater | TBW2 | 16.738 |
| Derwent Bridge | TDB2 | 185.741 |
| Derby | TDE2 | 36.957 |
| Devonport | TDP2 | 17.926 |
| Emu Bay | TEB2 | 21.118 |
| Electrona | TEL2 | 20.332 |
| Huon River | THR2 | 89.381 |
| Kermandie | TKE2 | 34.270 |
| Kingston 11KV | TKI2 | 17.896 |
| Kingston 33KV | TKI3 | 19.396 |
| Knights Road | TKR2 | 23.038 |
| Lindisfarne | TLF2 | 15.445 |
| Meadowbank | TMB2 | 15.998 |
| New Norfolk | TNN2 | 18.836 |
| Newton | TNT2 | 44.204 |
| Port Latta | TPL2 | 18.405 |
| Palmerston | TPM3 | 16.976 |
| Queenstown | TQT2 | 29.997 |
| Railton | TRA2 | 17.297 |
| Rosebery | TRB2 | 15.737 |
| Scottsdale | TSD2 | 38.753 |
| St Marys | TSM2 | 25.422 |
| Sorell | TSO2 | 21.672 |
| Savage River | TSR2 | 12.004 |
| Smithton | TST2 | 24.295 |
| Triabunna | TTB2 | 29.715 |
| Tungatinah | TTU2 | 62.284 |
| Ulverstone | TUL2 | 17.069 |
| Waddamana | TWA2 | 36.008 |
| Wesley Vale | TWV2 | 9.648 |
| Hobart Virtual | TVN1 | 17.194 |
| Tamar Virtual | TVN2 | 15.121 |

Due to the interconnected nature of the Hobart region, transmission nodes (TCR2, TCS3, TLF2, TMT2, TNH2, TRI4 and TRK2) are averaged as a single Virtual Transmission Node (VTN) in accordance with the provisions of the Rules. The Transmission Node Identifier (TNI) in Table 30 for this VTN is TVN1.

Table 30 Hobart region virtual transmission node

| Transmission node description | Transmission node identifier |
|-------------------------------|------------------------------|
| Chapel Street | TCS3 |
| Creek Road | TCR2 |
| Lindisfarne | TLF2 |
| Mornington | TMT2 |
| North Hobart | TNH2 |
| Risdon | TRI4 |
| Rokeby | TRK2 |

Due to the interconnected nature of the Launceston/Tamar region, transmission nodes (TGT3, THA3, TMY2, TNW2, TSL2 and TTR2) are averaged as a single VTN in accordance with the provisions of the Rules. The TNI listed in Table 31 for this VTN is TVN2.

Table 31 Tamar region virtual transmission node

| Transmission node description | Transmission node identifier |
|-------------------------------|------------------------------|
| George Town | TGT3 |
| Hadspen | THA3 |
| Mowbray | TMY2 |
| Norwood | TNW2 |
| St Leonards | TSL2 |
| Trevallyn | TTR2 |

9 Standard control services – tariff variations

Clause 6.18.2(b)(5) of the Rules 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.

9.1 Adjustments to tariffs within a regulatory year

9.1.1 ITC network 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 2018-19. 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 2018-19, in line with the methodology set out in this Annual Distribution Pricing Proposal.

9.1.2 Changes to tariffs by network tariff class

Our TSS³¹ outlines our tariff strategy for the 2017-19 regulatory period, with Table 32 outlining the key tariff reforms we are implementing

Table 32 Networks tariff reforms

| Tariff | Reform | Rationale |
|--------------------------|---|--|
| Existing network tariffs | Transitioning towards recovery of our total efficient costs from each customer class | Over time the cost of serving each class of customer and the revenue we recover from each class of customer through network tariffs will become more closely aligned, which is fairer for all our customers. We have commenced this transition and will continue to transition over the forthcoming and subsequent regulatory control periods. |
| | Changing the relative contribution of service charges and variable network tariff components to the recovery of our costs | <p>The majority of our costs are fixed. Our Tariff Strategy recognises this and involves gradually increasing the service charges in our network tariffs, while decreasing the variable component. This better reflects the unavoidable nature of much of our network costs, and also supports the move to more efficient, cost reflective price signals to customers. The increased service charge also recognises the value to customers of a network connection, as a source of energy and a way to sell excess generation (such as solar generation).</p> <p>We have already begun increasing the service charge components of our network tariffs and will continue this process in line with our focus on delivering predictable and sustainable network prices for all our customers.</p> |

³¹ TasNetworks Tariff Structure Statement – Formal Statement – April 2017
TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

| Tariff | Reform | Rationale |
|----------------------------|--|---|
| | Appropriate realignment of network tariff prices | <p>For historic reasons there are currently a number of discounted network tariffs within our suite of network tariffs that send poor signals about network costs. Over time we will realign these network tariffs with other similar network tariffs to reduce the level of cross-subsidies between tariffs.</p> <p>We will continue to monitor and adjust our network tariffs in response to customer usage and market changes. This monitoring and refinement process will ensure that our network charges are, and continue to be, cost reflective and fair for all our customers.</p> |
| New demand network tariffs | Introducing three new time of use demand based network tariffs | <p>Technological and customer driven changes in the electricity market, such as the widespread uptake of solar panels, mean that the current flat, consumption based network tariffs used to recover the cost of the network are no longer fit for purpose.</p> <p>Our view is that time of use, demand based network tariffs are the best network tariff structure for the future. They better reflect the costs of providing network services and the drivers of those costs. We also think these tariffs send price signals to customers that may change their use of electricity in ways that defer or negate the need for the provision of additional network capacity.</p> <p>Through the transition we will work to build customer understanding about demand based network tariffs.</p> |

Table 33 shows the percentage change of the average DUoS, TUoS and overall NUoS price for each tariff class for 2017-18 to 2018-19

Table 33 Weighted average price movement by Tariff Class

| Tariff Class | DUoS price movement (%) | TUoS price movement (%) | NUoS price movement (%) |
|---------------------|-------------------------|-------------------------|-------------------------|
| ITC | (0.3%) | (1.3%) | (1.0%) |
| High Voltage | 1.7% | (5.2%) | (1.3%) |
| Irrigation | 2.1% | (9.3%) | (0.1%) |
| Large Low Voltage | 1.6% | (9.3%) | (2.5%) |
| Small Low Voltage | 1.7% | (12.6%) | (2.1%) |
| Residential | 1.9% | (12.2%) | (0.7%) |
| Uncontrolled Energy | 4.4% | (12.7%) | (3.1%) |
| Controlled Energy | 4.1% | (6.9%) | 2.0% |
| Unmetered | 1.5% | (10.3%) | (0.7%) |
| Street Lighting | 1.2% | (6.7%) | (0.9%) |

9.2 Variations between the 2017-18 and 2018-19 regulatory years

TasNetworks' total revenue for standard control services has increased by approximately 1.0 per cent between 2017-18 and 2018-19, while the consumption of electricity by customers of those services is expected to be approximately 2.87 per cent higher.

TasNetworks has adopted the following general strategies in setting its network tariffs for 2018-19 to ensure customer impacts are managed on the transition to more cost-reflective tariffs. In a number of instances these strategies have remained unchanged from the previous regulatory year. These tariff strategies are:

- the DUoS and TUoS components of all network tariffs will be rebalanced to ensure an appropriate recovery of these components;
- customers on the General Network – Nursing Homes network tariff have previously received a discounted energy rate. As a result of the general reduction in network tariffs for 2018-19 we were able to align this tariff with the General Network – Business network tariff;
- customers on the General Network – Business Curtilage network tariff have previously received a discounted daily charge. In line with TasNetworks' Network Tariff Strategy the discount will be removed at an accelerated rate until such a time as the daily charge achieves parity with the daily charge within the General Network – Business network tariff. When the discount has been removed, the General Network – Business Curtilage network tariff will be discontinued and will not be available to any customer. TasNetworks will write to any customers remaining on this network tariff, at this time, advising that TasNetworks intends to reassign those customers to the General Network – Business network tariff;
- customers on the Uncontrolled LV heating network tariff have previously received a discounted rate for the delivery of energy. In line with TasNetworks' Network Tariff Strategy, for the 2017-18 regulatory year the energy charge discount has been further reduced; and
- rebalancing to ensure appropriate revenue recovery.

Further to the strategies highlighted above, in 2018-19 we are offering two new demand-based time of use tariffs designed for residential and small business customers that deploy distributed energy technologies, such as solar panels and battery storage, which are opt-in only. These two tariffs will be available from 1 December 2018.

Initially, both tariffs will be offered on a discounted basis (50 per cent reduction to the off-peak rate), to provide economically-justified incentives to encourage take-up of the new tariffs on an opt-in basis. We are applying the same discounting arrangements to the time of use demand based tariffs introduced in 2017 to further incentivise their uptake as well. With the goal of cost reflectivity in mind, the discounts will be offered on a transitional basis only and will decline progressively over the course of the 2019-24 period, to the point that no discount will be offered from 1 July 2024.

We are funding the discount cost directly (estimated to be \$0.023 million in 2018-19), so the cost of the discount will not be passed onto other customers.

9.2.1 Reallocation between fixed and variable costs

In line with our tariff strategy we have increased our fixed service costs in line with our indicative pricing schedule as set out in the TSS³².

³² TasNetworks Tariff Structure Statement – Formal Statement – April 2017
TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

9.2.2 Rebalancing of DUoS and TUoS revenues

TasNetworks has forecast its DUoS and TUoS components to achieve the following outcomes:

- recover the total allowable revenue; and
- the TUoS and DUoS components of that revenue also match the forecast transmission network charges (passed through for recovery via network tariffs) and TasNetworks' Revenue Cap.



10 Alternative control services

‘Alternative control’ 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 TasNetworks³³ 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.

10.1 Metering services

This section sets out the indicative prices for the metering services provided by TasNetworks.

10.1.1 Overview of 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 6 in Section 3.4 above.

10.1.2 Setting the 2018-19 metering services tariffs

This section provides an overview of how the allowable prices for metering services are recovered through tariffs.

The 2018-19 metering services 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 TasNetworks³⁴. Our price caps for the provision of metering services are calculated in accordance with the following formula, given by the AER in its distribution determination for TasNetworks³⁵:

$$\bar{p}_i^t = \bar{p}_i^{t-1} \times (1 + CPI_t) \times (1 - X_i^t)$$

Table 34 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its metering services tariffs.

³³ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

³⁴ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

³⁵ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

Table 34 Price cap calculation – metering services

| Component | Value | Comment |
|-------------------|---------|--|
| \bar{P}_i^t | Various | The cap on the price of service i in year t. |
| P_i^t | Various | The price of service i in year t. The initial value is to be decided in the AER's distribution determination for TasNetworks. |
| \bar{P}_{i-1}^t | Various | The cap on the price of service i in year t-1. |
| ΔCPI_t | 1.91% | 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 t-2 to the December quarter in year t-1. |
| X_i^t | 0.00% | The 'X' factor as specified in the AER's distribution determination for TasNetworks. |

10.1.3 Prices for metering services

The proposed 2018-19 prices for each of TasNetworks' metering services tariffs are outlined in Table 35.

Table 35 Tariffs for metering services

| Tariff | | Price (c/day) | Annual charge (\$) |
|----------------------------|-------------|---------------|--------------------|
| Domestic LV – single phase | Capital | 3.253 | 11.87 |
| | Non-capital | 2.949 | 10.76 |
| Domestic LV – multi phase | Capital | 6.751 | 24.64 |
| | Non-capital | 6.121 | 22.34 |
| Domestic LV – CT meters | Capital | 8.355 | 30.50 |
| | Non-capital | 7.574 | 27.65 |
| Business LV – single phase | Capital | 3.365 | 12.28 |
| | Non-capital | 3.051 | 11.14 |
| Business LV – multi phase | Capital | 6.731 | 24.57 |
| | Non-capital | 6.103 | 22.28 |
| Business LV – CT meter | Capital | 8.704 | 31.77 |
| | Non-capital | 7.892 | 28.81 |
| Other – T09 | Capital | 5.940 | 21.68 |
| | Non-capital | 5.386 | 19.66 |

10.2 Public lighting services

This section sets out the indicative prices for the public lighting services provided by TasNetworks.

It is important to note that the final tariff for the provision of public lighting services comprises 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 tariffs is discussed in this section.

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

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;
- the installation of contract lights, which will be provided on a quoted service basis and is, therefore, categorised as an ancillary service – quoted service; and
- the provision of new public lighting technologies, which will be classified as a negotiated distribution 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. The AER has also determined that TasNetworks may charge a fee for the previous provision of poles in support of certain lights (referred to as **surcharge poles**).

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

These lighting types are shown in Table 7 and Table 8 of section 3.4 above.

10.2.2 Setting the 2018-19 public lighting services tariffs

This section provides an overview of how the allowable prices for public lighting services are recovered through tariffs.

The 2018-19 public lighting services 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 TasNetworks³⁶.

TasNetworks' price caps for the provision of public lighting services are calculated in accordance with the formula given by the AER in its distribution determination for TasNetworks³⁷:

$$\bar{p}_i^t = \bar{p}_i^{t-1} \times (1 + CPI_t) \times (1 - X_i^t)$$

Table 36 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its public lighting tariffs.

³⁶ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

³⁷ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

Table 36 Price cap calculation – public lighting services

| Component | Value | Comment |
|-------------------|---------|--|
| \bar{P}_i^t | Various | The cap on the price of service i in year t. |
| P_i^t | Various | The price of service i in year t. The initial value is to be decided in the AER's distribution determination for TasNetworks. |
| \bar{P}_{i-1}^t | Various | The cap on the price of service i in year t-1. |
| ΔCPI_t | 1.91% | 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 t-2 to the December quarter in year t-1. |
| X_i^t | -0.62% | The 'X' factor as given in the AER's distribution determination for TasNetworks. |

10.2.3 Prices for public lighting services

The proposed 2018-19 prices for each of TasNetworks' public light tariffs are set out in Table 37.

Table 37 Tariffs for public lighting by type

| Lighting type | Price (c/day) | Annual charge (\$) |
|---|---------------|--------------------|
| 18W LED | 34.339 | 125.34 |
| 18W LED decorative | 48.088 | 175.52 |
| 25W LED | 34.339 | 125.34 |
| 25W LED decorative | 48.088 | 175.52 |
| 42W compact fluorescent | 36.047 | 131.57 |
| 42W compact fluorescent – bottom pole entry | 36.047 | 131.57 |
| 70W sodium vapour | 35.882 | 130.97 |
| 100W sodium vapour | 45.521 | 166.15 |
| 150W sodium vapour | 47.881 | 174.77 |
| 250W sodium vapour | 49.024 | 178.94 |
| 400W sodium vapour | 49.888 | 182.09 |
| 250W sodium vapour – flood light | 53.133 | 193.94 |
| 400W sodium vapour – flood light | 52.599 | 191.99 |
| 100W metal halide | 45.676 | 166.72 |
| 150W metal halide | 48.462 | 176.89 |
| 250W metal halide | 49.327 | 180.04 |
| 400W metal halide | 54.733 | 199.78 |
| 250W metal halide – flood light | 54.883 | 200.32 |
| 400W metal halide – flood light | 54.733 | 199.78 |
| T5 fluorescent 2 x 24W (obsolete) | 38.032 | 138.82 |

| Lighting type | Price (c/day) | Annual charge (\$) |
|--|---------------|--------------------|
| 1 x 20W fluorescent (obsolete) | 37.742 | 137.76 |
| 50W mercury vapour (obsolete) | 33.519 | 122.34 |
| 80W mercury vapour (obsolete) | 33.520 | 122.35 |
| 80W mercury vapour – decorative (obsolete) | 50.566 | 184.57 |
| 125W mercury vapour (obsolete) | 45.386 | 165.66 |
| 250W mercury vapour (obsolete) | 45.865 | 167.41 |
| 400W mercury vapour (obsolete) | 48.033 | 175.32 |

The proposed 2018-19 prices for each of TasNetworks' contract light tariffs are outlined in Table 38.

Table 38 Tariffs for contract lighting by type

| Lighting type | Price (c/day) | Annual charge (\$) |
|---|---------------|--------------------|
| 18W LED | 12.349 | 45.07 |
| 18W LED decorative | 12.349 | 45.07 |
| 25W LED | 12.349 | 45.07 |
| 25W LED decorative | 12.349 | 45.07 |
| 42W compact fluorescent | 18.222 | 66.51 |
| 42W compact fluorescent – bottom pole entry | 18.222 | 66.51 |
| 70W sodium vapour | 18.434 | 67.28 |
| 100W sodium vapour | 22.559 | 82.34 |
| 150W sodium vapour | 22.555 | 82.33 |
| 250W sodium vapour | 22.688 | 82.81 |
| 400W sodium vapour | 22.734 | 82.98 |
| 250W sodium vapour – flood light | 22.688 | 82.81 |
| 400W sodium vapour – flood light | 22.734 | 82.98 |
| 100W metal halide | 22.556 | 82.33 |
| 150W metal halide | 22.703 | 82.87 |
| 250W metal halide | 22.703 | 82.87 |
| 400W metal halide | 23.408 | 85.44 |
| 250W metal halide – flood light | 22.703 | 82.87 |
| 400W metal halide – flood light | 23.408 | 85.44 |
| 50W mercury vapour (obsolete) | 18.088 | 66.02 |
| 80W mercury vapour (obsolete) | 18.056 | 65.90 |
| 80W mercury vapour – Aeroscreen (obsolete) | 18.056 | 65.90 |
| 125W mercury vapour (obsolete) | 21.646 | 79.01 |
| 250W mercury vapour (obsolete) | 21.646 | 79.01 |

| Lighting type | Price (c/day) | Annual charge (\$) |
|--------------------------------|---------------|--------------------|
| 400W mercury vapour (obsolete) | 21.799 | 79.57 |
| 1 x 20W fluorescent (obsolete) | 18.189 | 66.39 |
| 2 x 20W fluorescent (obsolete) | 18.480 | 67.45 |
| 1 x 40W fluorescent (obsolete) | 18.208 | 66.46 |
| 2 x 40W fluorescent (obsolete) | 18.518 | 67.59 |
| 3 x 40W fluorescent (obsolete) | 22.414 | 81.81 |
| 4 x 40W fluorescent (obsolete) | 22.722 | 82.94 |
| 4 x 20W fluorescent (obsolete) | 19.062 | 69.58 |
| 60W incandescent (obsolete) | 18.023 | 65.78 |
| 100W incandescent (obsolete) | 21.610 | 78.88 |

10.3 Ancillary Service – fee based services

This section sets out the indicative prices for the fee based services provided by TasNetworks.

10.3.1 Overview

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 alteration;
- meter testing;
- supply abolishment – removal of meters and service connection;
- renewable energy connection; and
- other miscellaneous services.

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 9 of section 3.4.

10.3.2 Setting the 2018-19 fee based services tariffs

This section provides an overview of how the allowable prices for fee based services are recovered through tariffs.

The 2018-19 fee based services 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 TasNetworks³⁸.

TasNetworks' price caps for the provision of fee based services are calculated in accordance with the formula given by the AER in its distribution determination for TasNetworks³⁹:

$$\bar{P}_i^t = \bar{P}_i^{t-1} \times (1 + CPI_t) \times (1 - X_i^t)$$

Table 39 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its fee based services tariffs.

Table 39 Table 1: Price cap calculation – fee based services

| Component | Value | Comment |
|---------------------|---------|--|
| \bar{P}_i^t | Various | The cap on the price of service i in year t. |
| P_i^t | Various | The price of service i in year t. The initial value is to be decided in the AER's distribution determination for TasNetworks. |
| $\bar{P}_{i,t-1}^i$ | Various | The cap on the price of service i in year t-1. |
| ΔCPI_t | 1.91% | 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 t-2 to the December quarter in year t-1. |
| X_i^t | 0.00% | The 'X' factor as given in the AER's distribution determination for TasNetworks. |

10.3.3 Prices for fee based services

The proposed 2018-19 prices for each of TasNetworks' fee based services tariffs are outlined in Table 40.

Table 40 Tariffs for fee based services

| Service | Price (\$) |
|---|------------|
| Energisation, de-energisation, re-energisation and special reads | |
| Site visit – no appointment | 60.67 |
| Site visit – non-scheduled visit | 134.10 |
| Site visit – same day premium service | 227.10 |
| Site visit – after hours | 357.01 |
| Site visit – credit action or site issues | 141.11 |
| Site visit – credit action pillar box/pole top | 253.22 |

³⁸ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

³⁹ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

| Service | Price (\$) |
|--|------------|
| Site visit – current transformer (CT) metering | 131.49 |
| Site visit – pillar box/pole top | 253.22 |
| Site visit – pillar box/pole top wasted visit | 150.96 |
| Transfer of retailer | 0.00 |
| Meter alteration | |
| Tariff alteration – single phase | 142.55 |
| Tariff alteration – three phase | 186.83 |
| Adjust time clock | 82.79 |
| Install pulse outputs | 131.49 |
| Remove meter – single phase | 142.55 |
| Remove meter – multi phase | 186.83 |
| Meter alteration – after hours visit | 437.67 |
| Meter alteration – wasted visit | 87.21 |
| Meter test | |
| Meter test – single phase | 220.03 |
| Meter test – multi phase | 419.24 |
| Meter test – current transformer (CT) | 463.52 |
| Meter test – after hours | 841.00 |
| Meter test –wasted visit | 87.21 |
| Supply abolishment | |
| Remove service & meters | 265.70 |
| Supply abolishment – after hours | 668.30 |
| Supply abolishment – wasted visit | 172.75 |
| Truck tee-up | |
| Tee-up/appointment | 149.06 |
| Tee-up/appointment – after hours | 668.30 |
| Tee-up/appointment – no truck – after hours | 357.01 |
| Tee-up/appointment – wasted visit | 97.77 |
| Miscellaneous services | |
| Open turret | 140.40 |
| Data download | 281.48 |
| Alteration to unmetered supply | 217.35 |
| Meter relocation | 168.85 |
| Miscellaneous service | 127.58 |
| Miscellaneous service – after hours | 570.01 |

| Service | Price (\$) |
|---|------------|
| Miscellaneous service – wasted visit | 101.92 |
| Connection establishment charges | |
| Overhead service, single span – single phase | 561.54 |
| Overhead service, single span – multi phase | 791.97 |
| Underground service in turret/cabinet – single phase | 184.02 |
| Underground service in turret/cabinet – multi phase | 230.79 |
| Underground service with pole mounted fuse – single phase | 430.40 |
| Underground service with pole mounted fuse – multi phase | 540.57 |
| Basic connection – after hours | 1,029.66 |
| Connection establishment – wasted visit | 157.38 |
| Renewable energy connection | |
| Modify existing connection for micro embedded generation – single phase | 174.44 |
| Modify existing connection for micro embedded generation – multi phase | 218.71 |
| Renewable energy connection – after hours | 824.56 |
| Renewable energy – wasted visit | 119.10 |
| Temporary disconnection charges | |
| Disconnect/reconnect overhead service for facia repairs – single phase | 328.83 |
| Disconnect/connect overhead service for facia repairs – multi phase | 421.80 |
| Temporary disconnect/reconnect – after hours | 868.85 |
| Temporary disconnect/reconnect – wasted visit | 189.40 |
| Basic connection alteration | |
| Connection alteration – overhead single phase | 328.83 |
| Connection alteration – overhead multi-phase | 421.80 |
| Connection of new consumer mains to an existing installation – underground single phase to turret or pole | 229.51 |
| Connection of new consumer mains to an existing installation – underground multi-phase to turret or pole | 280.81 |
| Augment single phase overhead service to multi-phase supply | 861.70 |
| Augment multi-phase overhead service to single phase supply | 631.27 |
| Augment single phase overhead service to underground supply (turret) | 399.81 |
| Augment multi-phase overhead service to underground supply (turret) | 492.77 |
| Augment single phase overhead service to underground supply (pole) | 500.12 |
| Augment multi-phase overhead service to underground supply (pole) | 610.28 |
| Basic connection alteration – after hours | 1,102.84 |
| Basic connection – wasted visit | 177.78 |

10.4 Ancillary Service – quoted services

This section sets out the indicative prices for the quoted services provided by TasNetworks.

10.4.1 Overview

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 (new design, construction fees, and non-standard) services may be received from a customer or retailer on behalf of a customer. TasNetworks provides a range of new design, construction, and non-standard services on a quoted basis including, but not limited to, new design and construction fees set in out in Table 10 of section 3.4.

10.4.2 Setting the 2018-19 quoted services tariffs

This section provides an overview of how the allowable prices for quoted services are recovered through tariffs.

The 2018-19 quoted services tariffs and charging parameters set out in this Annual Distribution Pricing Proposal are based on the price caps as determined by the AER in its distribution determination for TasNetworks⁴⁰.

TasNetworks' price caps for the provision of quoted services are calculated in accordance with the formula given by the AER in its distribution determination for TasNetworks⁴¹:

Price = Labour + Contractor Services + Materials

In accordance with the AER's distribution determination for TasNetworks, we are only required to provide a calculation of labour rates as a component of this Annual Distribution Pricing Proposal.

TasNetworks' price caps for the labour rates within quoted services are escalated annually in accordance with the formula given by the AER in its distribution determination for TasNetworks⁴²:

$$(1 + \Delta\text{CPI}_t)(1 - X_t^i)$$

Table 41 provides details of the labour rate cap calculation that TasNetworks has utilised in the preparation of its quoted services tariffs.

Table 41 Price cap calculation for quoted services

| Component | Value | Comment |
|----------------------|---------|--|
| Labour | Various | The price for each quoted service labour rate as given in the AER's distribution determination for TasNetworks. |
| ΔCPI_t | 1.91% | 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 t-2 to the December quarter in year t-1. |
| X_t^i | 0.00% | The X factor for service i in year t. |

⁴⁰ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

⁴¹ Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

⁴² Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

10.4.3 Labour prices for quoted services

The proposed 2018-19 prices for each of TasNetworks' quoted services tariffs are outlined in Table 42.

Table 42 Tariffs for quoted services

| Labour | Price (\$/hour) |
|--|-----------------|
| Cable jointer | 61.72 |
| Customer connections – commercial metering | 64.30 |
| Customer connections – service crew | 63.32 |
| Designer | 71.39 |
| Distribution electrical technician | 63.44 |
| Distribution linesman | 57.43 |
| Distribution linesman – live line | 64.59 |
| Distribution operator | 70.98 |
| Electrical inspector | 59.43 |
| Field service co-ordinator | 73.76 |
| Labourer – overhead | 49.34 |
| Meter reader | 49.15 |
| Pole tester | 51.18 |
| Project manager | 87.70 |

11 Customer price impacts – alternative control services

The price changes between 2017-18 and 2018-19 for alternative control services are provided in the following tables.

11.1 Metering services

Table 43 provides the difference in the charges between 2017-18 and 2018-19 for the provision of metering services.

Table 43 Metering services – percentage price change

| Tariff | | Price 2017-18 (c/day) | Price 2018-19 (c/day) | Percentage change (%) |
|----------------------------|-------------|-----------------------|-----------------------|-----------------------|
| Domestic LV – single phase | Capital | 3.192 | 3.253 | 1.9% |
| | Non-capital | 2.894 | 2.949 | 1.9% |
| Domestic LV – multi phase | Capital | 6.624 | 6.751 | 1.9% |
| | Non-capital | 6.006 | 6.121 | 1.9% |
| Domestic LV – CT meters | Capital | 8.198 | 8.355 | 1.9% |
| | Non-capital | 7.432 | 7.574 | 1.9% |
| Business LV – single phase | Capital | 3.302 | 3.365 | 1.9% |
| | Non-capital | 2.994 | 3.051 | 1.9% |
| Business LV – multi phase | Capital | 6.605 | 6.731 | 1.9% |
| | Non-capital | 5.989 | 6.103 | 1.9% |
| Business LV – CT meters | Capital | 8.541 | 8.704 | 1.9% |
| | Non-capital | 7.744 | 7.892 | 1.9% |
| Other meters (PAYG) | Capital | 5.829 | 5.940 | 1.9% |
| | Non-capital | 5.285 | 5.386 | 1.9% |

11.2 Public lighting services

Table 44 provides the difference in the charges between 2017-18 and 2018-19 for the provision of public lighting services.

Table 44 Public lighting – percentage price change

| Tariff | Price 2017-18 (c/day) | Price 2018-19 (c/day) | Percentage change (%) |
|---|-----------------------|-----------------------|-----------------------|
| 18W LED | 33.488 | 34.339 | 2.5% |
| 18W LED decorative | 46.896 | 48.088 | 2.5% |
| 25W LED | 33.488 | 34.339 | 2.5% |
| 25W LED decorative | 46.896 | 48.088 | 2.5% |
| 42W compact fluorescent | 35.153 | 36.047 | 2.5% |
| 42W compact fluorescent – bottom pole entry | 35.153 | 36.047 | 2.5% |

| Tariff | Price 2017-18 (c/day) | Price 2018-19 (c/day) | Percentage change (%) |
|--|-----------------------|-----------------------|-----------------------|
| 70W sodium vapour | 34.993 | 35.882 | 2.5% |
| 100W sodium vapour | 44.393 | 45.521 | 2.5% |
| 150W sodium vapour | 46.694 | 47.881 | 2.5% |
| 250W sodium vapour | 47.809 | 49.024 | 2.5% |
| 400W sodium vapour | 48.651 | 49.888 | 2.5% |
| 250W sodium vapour – flood light | 51.816 | 53.133 | 2.5% |
| 400W sodium vapour – flood light | 51.295 | 52.599 | 2.5% |
| 100W metal halide | 44.544 | 45.676 | 2.5% |
| 150W metal halide | 47.261 | 48.462 | 2.5% |
| 250W metal halide | 48.104 | 49.327 | 2.5% |
| 400W metal halide | 53.376 | 54.733 | 2.5% |
| 250W metal halide – flood light | 53.523 | 54.883 | 2.5% |
| 400W metal halide – flood light | 53.376 | 54.733 | 2.5% |
| T5 fluorescent 2 x 24W (obsolete) | 37.089 | 38.032 | 2.5% |
| 1 x 20W fluorescent (obsolete) | 36.806 | 37.742 | 2.5% |
| 50W mercury vapour | 32.688 | 33.519 | 2.5% |
| 80W mercury vapour (obsolete) | 32.689 | 33.520 | 2.5% |
| 80W mercury vapour – decorative (obsolete) | 49.313 | 50.566 | 2.5% |
| 125W mercury vapour (obsolete) | 44.261 | 45.386 | 2.5% |
| 250W mercury vapour (obsolete) | 44.728 | 45.865 | 2.5% |
| 400W mercury vapour (obsolete) | 46.842 | 48.033 | 2.5% |

Table 45 provides the difference in the charges between 2017-18 and 2018-19 for the provision of contract lighting services.

Table 45 Contract lighting – percentage price changes

| Tariff | Price 2017-18 (c/day) | Price 2018-19 (c/day) | Percentage change (%) |
|---|-----------------------|-----------------------|-----------------------|
| 18W LED | 12.043 | 12.349 | 2.5% |
| 18W LED decorative | 12.043 | 12.349 | 2.5% |
| 25W LED | 12.043 | 12.349 | 2.5% |
| 25W LED decorative | 12.043 | 12.349 | 2.5% |
| 42W compact fluorescent | 17.770 | 18.222 | 2.5% |
| 42W compact fluorescent – bottom pole entry | 17.770 | 18.222 | 2.5% |
| 70W sodium vapour | 17.977 | 18.434 | 2.5% |
| 100W sodium vapour | 22.000 | 22.559 | 2.5% |

| Tariff | Price 2017-18 (c/day) | Price 2018-19 (c/day) | Percentage change (%) |
|--|-----------------------|-----------------------|-----------------------|
| 150W sodium vapour | 21.996 | 22.555 | 2.5% |
| 250W sodium vapour | 22.126 | 22.688 | 2.5% |
| 400W sodium vapour | 22.170 | 22.734 | 2.5% |
| 250W sodium vapour – flood light | 22.126 | 22.688 | 2.5% |
| 400W sodium vapour – flood light | 22.170 | 22.734 | 2.5% |
| 100W metal halide | 21.997 | 22.556 | 2.5% |
| 150W metal halide | 22.140 | 22.703 | 2.5% |
| 250W metal halide | 22.140 | 22.703 | 2.5% |
| 400W metal halide | 22.828 | 23.408 | 2.5% |
| 250W metal halide – flood light | 22.140 | 22.703 | 2.5% |
| 400W metal halide – flood light | 22.828 | 23.408 | 2.5% |
| 50W mercury vapour (obsolete) | 17.640 | 18.088 | 2.5% |
| 80W mercury vapour (obsolete) | 17.608 | 18.056 | 2.5% |
| 80W mercury vapour – Aeroscreen (obsolete) | 17.608 | 18.056 | 2.5% |
| 125W mercury vapour (obsolete) | 21.109 | 21.646 | 2.5% |
| 250W mercury vapour (obsolete) | 21.109 | 21.646 | 2.5% |
| 400W mercury vapour (obsolete) | 21.259 | 21.799 | 2.5% |
| 1 x 20W fluorescent | 17.738 | 18.189 | 2.5% |
| 2 x 20W fluorescent | 18.022 | 18.480 | 2.5% |
| 1 x 40W fluorescent | 17.757 | 18.208 | 2.5% |
| 2 x 40W fluorescent | 18.059 | 18.518 | 2.5% |
| 3 x 40W fluorescent | 21.858 | 22.414 | 2.5% |
| 4 x 40W fluorescent | 22.159 | 22.722 | 2.5% |
| 4 x 20W fluorescent | 18.589 | 19.062 | 2.5% |
| 60W incandescent | 17.576 | 18.023 | 2.5% |
| 100W incandescent | 21.074 | 21.610 | 2.5% |

11.3 Fee based services

Table 46 provides the difference in the charges between 2017-18 and 2018-19 for the provision of fee based services.

Table 46 Fee based services – percentage price change

| Tariff | Price 2017-18 (\$) | Price 2018-19 (\$) | Percentage change (%) |
|---|--------------------|--------------------|-----------------------|
| De-energisation, re-energisation and special reads | | | |
| Site visit – no appointment | 59.53 | 60.67 | 1.9% |
| Site visit – non-scheduled visit | 131.59 | 134.10 | 1.9% |
| Site visit – same day premium service | 222.84 | 227.10 | 1.9% |
| Site visit – after hours | 350.32 | 357.01 | 1.9% |
| Site visit – credit action or site issues | 138.47 | 141.11 | 1.9% |
| Site visit – credit action pillar box/pole top | 248.47 | 253.22 | 1.9% |
| Site visit – current transformer (CT) metering | 129.03 | 131.49 | 1.9% |
| Site visit – pillar box/pole top | 248.47 | 253.22 | 1.9% |
| Site visit – pillar box/pole top wasted visit | 148.13 | 150.96 | 1.9% |
| Transfer of retailer | 0.00 | 0.00 | 0.0% |
| Meter alteration | | | |
| Tariff alteration – single phase | 139.88 | 142.55 | 1.9% |
| Tariff alteration – three phase | 183.33 | 186.83 | 1.9% |
| Adjust time clock | 81.24 | 82.79 | 1.9% |
| Install pulse outputs | 129.03 | 131.49 | 1.9% |
| Remove meter – single phase | 139.88 | 142.55 | 1.9% |
| Remove meter – multi phase | 183.33 | 186.83 | 1.9% |
| Meter alteration – after hours visit | 429.47 | 437.67 | 1.9% |
| Meter alteration – wasted visit | 85.58 | 87.21 | 1.9% |
| Meter test | | | |
| Meter test – single phase | 215.91 | 220.03 | 1.9% |
| Meter test – multi phase | 411.38 | 419.24 | 1.9% |
| Meter test – CT | 454.83 | 463.52 | 1.9% |
| Meter test – after hours | 825.24 | 841.00 | 1.9% |
| Meter test –wasted visit | 85.58 | 87.21 | 1.9% |
| Supply abolishment | | | |
| Remove service and meters | 260.72 | 265.70 | 1.9% |
| Supply abolishment – after hours | 655.77 | 668.30 | 1.9% |
| Supply abolishment – wasted visit | 169.51 | 172.75 | 1.9% |

| Tariff | Price 2017-18 (\$) | Price 2018-19 (\$) | Percentage change (%) |
|---|--------------------|--------------------|-----------------------|
| Truck tee-up | | | |
| Tee-up/Appointment | 146.27 | 149.06 | 1.9% |
| Tee-up/Appointment – after hours | 655.77 | 668.30 | 1.9% |
| Tee-up/Appointment – no truck – after hours | 350.32 | 357.01 | 1.9% |
| Tee-up/Appointment – wasted visit | 95.94 | 97.77 | 1.9% |
| Miscellaneous service | | | |
| Open turret | 137.77 | 140.40 | 1.9% |
| Data download | 276.20 | 281.48 | 1.9% |
| Alteration to unmetered supply | 213.28 | 217.35 | 1.9% |
| Meter relocation | 165.69 | 168.85 | 1.9% |
| Miscellaneous service | 125.19 | 127.58 | 1.9% |
| Miscellaneous service – after hours | 559.33 | 570.01 | 1.9% |
| Miscellaneous service – wasted visit | 100.01 | 101.92 | 1.9% |
| Connection establishment charges | | | |
| Overhead service, single span – single phase | 551.02 | 561.54 | 1.9% |
| Overhead service, single span – multiphase | 777.13 | 791.97 | 1.9% |
| Underground service in turret/cabinet – single phase | 180.57 | 184.02 | 1.9% |
| Underground service in turret/cabinet – multi-phase | 226.46 | 230.79 | 1.9% |
| Underground service with pole mounted fuse – single phase | 422.33 | 430.40 | 1.9% |
| Underground service with pole mounted fuse – multi-phase | 530.44 | 540.57 | 1.9% |
| Basic connection – after hours | 1,010.36 | 1,029.66 | 1.9% |
| Connection establishment wasted visit | 154.43 | 157.38 | 1.9% |
| Renewable energy connection | | | |
| Modify existing connection for micro embedded generation – single phase | 171.17 | 174.44 | 1.9% |
| Modify existing connection for micro embedded generation – multi-phase | 214.61 | 218.71 | 1.9% |
| Renewable energy connection – after hours | 809.11 | 824.56 | 1.9% |
| Renewable energy connection – wasted visit | 116.87 | 119.10 | 1.9% |
| Temporary disconnection charges | | | |
| Disconnect/reconnect overhead service for fascia repairs – single phase | 322.67 | 328.83 | 1.9% |
| Disconnect/reconnect overhead service for fascia repairs – multi-phase | 413.89 | 421.80 | 1.9% |

| Tariff | Price 2017-18 (\$) | Price 2018-19 (\$) | Percentage change (%) |
|---|--------------------|--------------------|-----------------------|
| Temporary disconnect/reconnect – after hours | 852.57 | 868.85 | 1.9% |
| Temporary disconnect/reconnect – wasted visit | 185.85 | 189.40 | 1.9% |
| Basic connection alteration | | | |
| Connection alteration – overhead single phase | 322.67 | 328.83 | 1.9% |
| Connection alteration – overhead multi-phase | 413.89 | 421.80 | 1.9% |
| Connection of new consumer mains to an existing installation – underground single phase to turret or pole | 225.21 | 229.51 | 1.9% |
| Connection of new consumer mains to an existing installation – underground multi-phase to turret or pole | 275.55 | 280.81 | 1.9% |
| Augment single phase overhead service to multi-phase supply | 845.55 | 861.70 | 1.9% |
| Augment multi-phase overhead service to single phase supply | 619.44 | 631.27 | 1.9% |
| Augment single phase overhead service to underground supply (turret) | 392.32 | 399.81 | 1.9% |
| Augment multi-phase overhead service to underground supply (turret) | 483.53 | 492.77 | 1.9% |
| Augment single phase overhead service to underground supply (pole) | 490.75 | 500.12 | 1.9% |
| Augment multi-phase overhead service to underground supply (pole) | 598.84 | 610.28 | 1.9% |
| Basic connection alteration – after hours | 1,082.17 | 1,102.84 | 1.9% |
| Basic connection wasted visit | 174.45 | 177.78 | 1.9% |

11.4 Quoted services

Table 47 provides the difference in the labour rate charges between 2017-18 and 2018-19 for the provision of quoted services.

Table 47 Quoted services – percentage price change

| Tariff | Price 2017-18 (\$/hour) | Price 2018-19 (\$/hour) | Percentage change (%) |
|--|-------------------------|-------------------------|-----------------------|
| Cable jointer | 60.56 | 61.72 | 1.9% |
| Customer connections – commercial metering | 63.09 | 64.30 | 1.9% |
| Customer connections – service crew | 62.13 | 63.32 | 1.9% |
| Designer | 70.05 | 71.39 | 1.9% |
| Distribution electrical technician | 62.25 | 63.44 | 1.9% |
| Distribution linesman | 56.35 | 57.43 | 1.9% |
| Distribution linesman – live line | 63.38 | 64.59 | 1.9% |

| Tariff | Price 2017-18 (\$/hour) | Price 2018-19 (\$/hour) | Percentage change (%) |
|----------------------------|-------------------------|-------------------------|-----------------------|
| Distribution operator | 69.65 | 70.98 | 1.9% |
| Electrical inspector | 58.32 | 59.43 | 1.9% |
| Field service co-ordinator | 72.38 | 73.76 | 1.9% |
| Labourer – overhead | 48.42 | 49.34 | 1.9% |
| Meter reader | 48.23 | 49.15 | 1.9% |
| Pole tester | 50.22 | 51.18 | 1.9% |
| Project manager | 86.06 | 87.70 | 1.9% |

12 Alternative control services – tariff variations

Clause 6.18.2(b)(5) of the Rules 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.

12.1 Changes to alternative control services pricing

Alternative control services will change in price in 2018-19, in accordance with the AER's distribution determination for TasNetworks⁴³.

12.2 Changes to alternative control services tariffs

There are no changes in 2018-19 to the tariffs applying to alternative control services.

However, it should be noted that the Australian Energy Market Commission (**AEMC**) has made changes to the Rules and National Energy Retail Rules in relation to the provision of metering services. Our metering charges are now split between a capital and a non-capital fee. Further detail is provided within our Metering Services Application and Price Guide.

Further to the metering rule changes above there are a number of Ancillary services – Fee based services that we will no longer provide. These are predominately metering alteration services.

⁴³ Final Distribution Determination, Tasmanian Networks Pty Ltd, 2017-18 to 2018-19, April 2017.

13 Confidential information

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 PP009 contain sensitive information. TasNetworks considers that this information should be protected as confidential, on the basis that it is neither common knowledge nor publicly 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.



14 Distribution pricing proposal compliance obligations

14.1 Overview

Section 6.18 of the Rules contains a range of compliance obligations which TasNetworks must meet in developing and publishing its annual distribution pricing proposals for the AER. Table 48 sets out those obligations and the section of this pricing proposal which addresses each requirement.

Table 48 Compliance obligations under the Rules

| Clause | Pricing Proposal Requirement | Reference |
|---------------|---|-----------|
| 6.18.1C(a) | No later than four months before the start of the regulatory years (other than the first regulatory year of a regulatory control period), a DNSP may notify the AER, affected retailers and affected retail customers of a new proposed tariff (a relevant tariff) that is determined otherwise than in accordance with the DNSP current tariff structure statement, if both of the following are satisfied: | Section 5 |
| 6.18.1C(a)(1) | The DNSP'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 DNSP's annual revenue requirement for that regulatory year (the individual threshold); and | Section 5 |
| 6.18.1C(a)(2) | The DNSP 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 DNSP's annual revenue requirement for that regulatory year (the cumulative threshold) | Section 5 |
| 6.18.1C(b) | Notwithstanding any other provision in the Rules to the contrary, a relevant tariff notified by the Distribution Network Service Provider in accordance with paragraph (a) is, for the remainder of the regulatory control period in which the notification is given: <ol style="list-style-type: none"> (1) not required to comply with the pricing principles for direct control services; and (2) for the purposes of the submission and approval of a pricing proposal, deemed to comply with the Distribution Network Service Provider's current tariff structure statement, unless, at any point in time after the notification of the relevant tariff is given under paragraph (a) (the post-notification point), either the individual threshold or the cumulative threshold (in each case calculated using actual rather than forecast revenue) are exceeded by virtue of the amount of revenue that is attributable to the relevant tariff, in which case sub-paragraphs (1) and (2) cease to apply to the relevant tariff in relation to the regulatory years that commence after the post-notification point. | Section 5 |

| Clause | Pricing Proposal Requirement | Reference |
|---------------|--|--|
| 6.18.1C(c) | Where sub-paragraphs (b)(1) and (2) cease to apply to a relevant tariff in accordance with paragraph (b), then sub-paragraphs (b)(1) and (2) will be taken to continue to apply to other relevant tariffs that were notified before the post-notification point, but only to the extent that those sub-paragraphs would apply if the first-mentioned relevant tariff were not a relevant tariff. | Section 5 |
| 6.18.2(a)(2) | A DNSP must 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. | This Annual Distribution Pricing Proposal |
| 6.18.2(b)(2) | A pricing proposal must 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. | Section 3 |
| 6.18.2(b)(3) | A pricing proposal must set out, for each proposed tariff, the charging parameters and the elements of service to which each charging parameter relates. | Section 3 |
| 6.18.2(b)(4) | A pricing proposal must 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. | Section 5 Attachment PP007 |
| 6.18.2(b)(5) | A pricing proposal must 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. | Section 9 Section 12 |
| 6.18.2(b)(6) | A pricing proposal must 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. | Section 3 Section 6 |
| 6.18.2(b)(6A) | A pricing proposal must set out how jurisdictional scheme amounts for each approved jurisdictional scheme are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those amounts. | There are no jurisdictional schemes applicable to TasNetworks. |
| 6.18.2(b)(6B) | A pricing proposal must describe how each approved jurisdictional scheme that has been amended since the last jurisdictional scheme approval date meets the jurisdictional scheme eligibility criteria. | There are no jurisdictional schemes applicable to TasNetworks. |
| 6.18.2(b)(7) | A pricing proposal must 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. | This Annual Distribution Pricing Proposal |
| 6.18.2(b)(7A) | A pricing proposal must 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 difference between them. | Section 5 |

| Clause | Pricing Proposal Requirement | Reference |
|--------------|---|--|
| 6.18.2(b)(8) | A pricing proposal must 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. | Section 4 Section 5 Section 10 Section 12 |
| 6.18.2(d) | At the same time as a Distribution Network Service Provider submits a pricing proposal under paragraph 6.18.2(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 regulatory control period and updated so as to take into account that pricing proposal. | Not applicable for 2018-19 |
| 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 | Not applicable for 2018-19 |
| 6.18.3(b) | Each customer for direct control services must be a member of one or more tariff classes. | Section 3 |
| 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 customer for both standard control services and alternative control services may be a member of two or more tariff classes). | Section 3 |
| 6.18.3(d)(1) | A tariff class must be constituted with regard to the need to group retail customers together on an economically efficient basis. | Section 3 |
| 6.18.3(d)(2) | A tariff class must be constituted with regard to the need to avoid unnecessary transaction costs. | Section 3 |
| 6.18.4(a)(1) | 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 principle that 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; (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 customer's premises as a result of a regulatory obligation or requirement. | Section 3 |

| Clause | Pricing Proposal Requirement | Reference |
|--------------|--|-------------------------------|
| 6.18.4(a)(2) | 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 principle that retail customers with a similar connection and usage profile should be treated on an equal basis. | Section 3 |
| 6.18.4(a)(3) | 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 principle that retail customers with micro-generation facilities should be treated no less favourably than customers without such facilities but with a similar load profile. | Section 3 |
| 6.18.4(a)(4) | In formulating provisions of a distribution determination governing the assignment of customers to tariff classes or the re-assignment of customers from one tariff class to another, the AER must have regard to the principle that a DNSP's decision to assign a customer to a particular tariff class, or to re-assign a customer from one tariff class to another should be subject to an effective system of assessment and review. | Section 3 |
| 6.18.4(b) | If the charging parameters for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged. | Section 3 |
| 6.18.5(a) | The network pricing objective is that the tariffs that a Distribution Network Service Provider charges in respect of its provision of direct control services to a retail customer should reflect the Distribution Network Service Provider's efficient costs of providing those services to the retail customer. | Section 4 Attachment PP001 |
| 6.18.5(b) | Subject to paragraph (c), a Distribution Network Service Provider's tariffs must comply with the pricing principles set out in paragraphs (e) to (j). | Section 4 |
| 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: <ul style="list-style-type: none"> (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 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 4 |

| Clause | Pricing Proposal Requirement | Reference |
|-----------|--|-----------|
| 6.18.5(e) | <p>For each tariff class, the revenue expected to be recovered should lie on or between:</p> <ul style="list-style-type: none"> (3) an upper bound representing the stand alone cost of serving the retail customers who belong to that class; and (4) a lower bound representing the avoidable cost of not serving those retail customers. | Section 4 |
| 6.18.5(f) | <p>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:</p> <ul style="list-style-type: none"> (1) the costs and benefits associated with calculating, implementing and applying that method as proposed; (2) the additional costs likely to be associated with meeting demand from retail customers that are assigned to that tariff at times of greatest utilisation of the relevant part of the distribution network; and (3) the location of retail customers that are assigned to that tariff and the extent to which costs vary between different locations in the distribution network. | Section 4 |
| 6.18.5(g) | <p>The revenue expected to be recovered from each tariff must:</p> <ul 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 that would result from tariffs that comply with the pricing principle set out in paragraph (f). | Section 4 |

| Clause | Pricing Proposal Requirement | Reference |
|-----------|--|--------------------------------|
| 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 usage decisions. | <p>Section 4 Section 5</p> |
| 6.18.5(i) | <p>The structure of each tariff must be reasonably capable of being understood by retail customers that are assigned to that tariff, having regard to:</p> <ol style="list-style-type: none"> (1) the type and nature of those retail customers; and (2) the information provided to, and the consultation undertaken with, those retail customers. | Section 3 |
| 6.18.5(j) | A tariff must comply with the Rules and all applicable regulatory instruments. | Section 5 |
| 6.18.6(a) | This clause applies only to tariff classes related to the provision of standard control services. | Section 5 |
| 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 5 |
| 6.18.6(c) | <p>The permissible percentage is the greater of the following:</p> <ol style="list-style-type: none"> (1) the CPI-X limitation on any increase in the DNSP's expected weighted average revenue between the two regulatory years plus 2%. (2) CPI plus 2%. | Section 5 |

| Clause | Pricing Proposal Requirement | Reference |
|------------|--|--|
| 6.18.6(d) | <p>In deciding whether the permissible percentage has been exceeded in a particular regulatory year, the following are to be disregarded:</p> <ol 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; and (4) the recovery of revenue to accommodate any increase in the Distribution Network Service Provider's annual revenue requirement by virtue of an application of a formula referred to in clause 6.5.2(l). | Section 5 |
| 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 DNSP. | Section 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 |
| 6.18.7(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 DNSP 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 rate of return used in the relevant distribution determination for the relevant regulatory year. | Section 6 Attachment PP007 |
| 6.18.7(d) | <p>Notwithstanding anything else in this clause 6.18.7, a DNSP 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 |
| 6.18.7A(a) | A pricing proposal must provide for tariffs designed to pass on to customers a DNSP's jurisdictional scheme amounts for approved jurisdictional schemes. | There are no jurisdictional schemes applicable to TasNetworks. |

| Clause | Pricing Proposal Requirement | Reference |
|------------|---|--|
| 6.18.7A(b) | The amount to be passed on to customers for a particular regulatory year must not exceed the estimated amount of jurisdictional scheme amounts for a DNSP's approved jurisdictional schemes adjusted for over or under recovery in accordance with paragraph (c). | There are no jurisdictional schemes applicable to TasNetworks. |
| 6.18.7A(c) | The over and under recovery amount must be calculated in a way that: <ol style="list-style-type: none"> (1) subject to subparagraphs (2) and (3) below, is consistent with the method determined by the AER for jurisdictional scheme amounts in the relevant distribution determination for the DNSP, or where no such method has been determined, with the method determined by the AER in the relevant distribution determination in respect of designated pricing proposal charges; (2) ensures a DNSP is able to recover from customers no more and no less than the jurisdictional scheme amounts it incurs; and (3) adjusts for an appropriate cost of capital that is consistent with the rate of return used in the relevant distribution determination for the relevant regulatory year. | There are no jurisdictional schemes applicable to TasNetworks. |

14.2 Compliance review

Clause 6.18.8 of the Rules requires that the AER must approve a Pricing Proposal if the AER is satisfied that:

- (3) the Proposal complies with Part I in Chapter 6 of the Rules (Distribution Pricing Rules), any relevant clauses in Chapter 11 of the Rules and any applicable distribution determination; and
- (4) all forecasts associated with the proposal are reasonable.

To assist the AER in this determination, we have undertaken a comprehensive review in section 14.1 above of this Annual Distribution Pricing Proposal to confirm that it is in accordance with the requirements of the Rules and the AER's distribution determination for TasNetworks. Further, KPMG has reviewed the pricing models underlying this Annual Distribution Pricing Proposal to confirm their appropriateness and validity.

15 Attachments

TasNetworks includes the following documents as attachments to this Annual Distribution Pricing Proposal.

Table 49 Attachments

| Reference | Title |
|-----------|---|
| PP001 | TEC Methodology |
| PP002 | Network Tariff Application and Price Guide |
| PP003 | Metering Services Application and Price Guide |
| PP004 | Public Lighting Application and Price Guide |
| PP005 | Ancillary Services – Fee Based Services Application and Price Guide |
| PP006 | Ancillary Services – Quoted Services Application and Price Guide |
| PP007 | AER Tariff Reconciliation Model (confidential) |
| PP008 | Annual Distribution Pricing Proposal Overview |
| PP009 | Confidentiality Template |

16 Listing of tables

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17 Glossary of terms/abbreviations

| Term | Definition |
|---|--|
| ABS | Australian Bureau of Statistics |
| AER | Australian Energy Regulator |
| ATMD | Any Time Maximum Demand |
| Aurora | Aurora Energy Pty Ltd |
| Business transitional feed-in tariff rate | The rate prescribed in section 44F of the ESI Act for small business customers |
| CPI | Consumer Price Index |
| CT | Current Transformer |
| DCoS | Distribution Cost of Supply |
| DMIS | Demand Management Incentive Scheme |
| DNSP | Distribution Network Service Provider |
| DPPC | Designated Pricing Proposal Charges |
| DUoS | Distribution Use of System |
| EHV or Extra High Voltage | A voltage of 88 kV and above |
| ESI Act | <i>Electricity Supply Industry Act 1995 (Tas)</i> |
| ESISC | Electrical Safety Inspection Service Charge |
| GW | GigaWatt |
| GWh | GigaWatt Hour |
| HV or High Voltage | A voltage exceeding 1,000 volts |
| Hydro or HEC | Hydro Electric Corporation or Hydro Electric Commission |
| ISO 9001 | Part of the ISO 9000 family of quality management system standards published by the International Organisation for Standardisation |
| ITC | Individual Tariff Calculation |
| kV | KiloVolt |
| kVA | KiloVolt Amp |
| kW | KiloWatt |
| kWh | KiloWatt Hour |
| LV or Low Voltage | A voltage not exceeding 1,000 volts |
| LRMC | Long Run Marginal Cost |
| MAR | Maximum Allowable Revenue |
| MD | Maximum Demand |
| MV | MegaVolt |
| MVA | MegaVolt Amps |
| MW | MegaWatt |

| Term | Definition |
|--|--|
| MWh | MegaWatt Hour |
| NECF | National Energy Customer Framework |
| NEL | National Electricity Law |
| NEM | National Electricity Market |
| NEMC | National Energy Market Charge |
| NUoS | The tariff for use of the distribution and transmission networks. It is the sum of both Distribution Use of System and Transmission Use of System Charges. |
| NPV | Net Present Value |
| OH | Overhead |
| Ombudsman Act | <i>Energy Ombudsman Act 1998 (Tas)</i> |
| OTTER | Office of the Tasmanian Economic Regulator |
| PAYG | The Pay As You Go package offered to electricity customers |
| Payguard | The credit management facility provided by Aurora as a component of PAYG |
| Private residential dwelling | A house, flat, home unit, town house or similar qualifying residential premise. A house, unit, town house or apartment that, in the reasonable opinion of TasNetworks, is not classifiable under the Australian and New Zealand Standard Industrial Classification (ANZSIC) and is used wholly or principally as a place of residence for personal, household or domestic purposes. The ANZSIC system is used to classify businesses and applies to any entity which provides goods and services, including companies, non-profit organisations, government departments and enterprises. |
| PTRM | Post Tax Revenue Model |
| RAB | Regulated Asset Base |
| Regulator | The meaning given in the <i>Economic Regulator Act 2009 (Tas)</i> |
| Residential transitional feed-in tariff rate | The rate prescribed in section 44F of the ESI Act for residential customers |
| TSS | TasNetworks Tariff Structure Statement – Formal Statement – April 2017 TasNetworks Tariff Structure Statement – Background and Explanation – April 2017 |
| Rules | National Electricity Rules (version 90) |
| TasNetworks | Tasmanian Networks Pty Ltd |
| Standard feed-in tariff rate | The rate determined by the Regulator in accordance with section 44G of the ESI Act |
| STPIS | Service Target Performance Incentive Scheme |
| TEC | Tasmanian Electricity Code |
| TNSP | Transmission Network Service Provider |
| ToU | Time of Use |
| TUoS | Transmission Use of System |

| Term | Definition |
|------|----------------------------------|
| UMS | Unmetered Supply |
| VT | Voltage Transformer |
| WACC | Weighted Average Cost of Capital |

