

# **Annual Distribution Pricing Proposal**

# 2017–18

As approved by the Australian Energy Regulator





#### Disclaimer

TasNetworks (which, for the purposes of this disclaimer, includes all of its related bodies corporate, its officers, employees, contractors, agents and consultants) makes no representation or warranty (express or implied) as to the accuracy, reliability, or completeness of the information contained in this document, or its suitability for any intended purpose. TasNetworks has no liability for any loss or damage (be it direct or indirect) arising out of, or in reliance on, any statements, opinions, information or matter contained in, or derived from, the information in this document.

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

Enquiries regarding this document should be addressed to: Commercial Solutions Team Leader PO Box 606 Moonah TAS 7009 Email: <u>networktariff@tasnetworks.com.au</u>







# 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 over half 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. It will continue over the two year regulatory period which commences on 1 July 2017. 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 Balcolme Chief Executive Officer





#### **Table of Contents**

1	Prefa	eface					
2	duction	2					
	2.1	Scope					
	2.2	Structure	2				
	2.3	Supporting documents	3				
	2.4	Further information	4				
	2.5	Overview of compliance obligations					
3	Tarif	f classes and tariffs	5				
	3.1	Overview	5				
	3.2	Network tariff classes – standard control services	5				
	3.3	Tariff structure and charging parameters	10				
		3.3.1 Recovery of Distribution Use of System	10				
		3.3.2 Recovery of Transmission Use of System	12				
	3.4	Tariff classes – alternative control services	13				
	3.5	Assignment of customers to tariffs	24				
	3.6	System of assessment and review of the basis on which a customer is charged	24				
	3.7	Transaction costs	25				
4	Prici	ng principles	26				
	4.1	Overview	26				
	4.2	Stand-alone and avoidable costs					
	4.3	Stand-alone and avoidable costs – standard control services	27				
	4.4	Stand-alone and avoidable costs – alternative control services					
	4.5	Long run marginal cost	28				
	4.6	Total efficient cost	30				
	4.7	Impact on retail customers	30				
5	Stan	dard control services – compliance with regulatory requirements	31				
	5.1	Total revenue allowance	31				
	5.2	Setting the 2017-18 network tariffs	31				
		5.2.1 Total allowable revenue and revenue cap	31				
		5.2.2 Tariff development	33				
		5.2.3 Energy consumption, demand and customer forecasts	33				
	5.3	DUoS unders and overs	34				
	5.4	Compliance with side constraints	34				
		5.4.1 Weighted average revenue	34				
	5.5	2017-18 pricing and indicative prices provided in the TSS	35				
	5.6	Compliance with National Electricity Rules and applicable regulatory instruments	36				
6	Tran	smission charges	37				
	6.1	TUoS expenses	37				
		6.1.1 Transmission charges	37				
		6.1.2 Standard transmission charges	37				
		6.1.3 Avoided TUoS	37				
	6.2	TUoS receipts	37				



	6.3	6.3 Tariff recovery of TUoS					
	6.4 Designated pricing proposal charges unders and overs account						
7	Standard control services – customer price impacts						
	7.1	Price movements in 2017-18	39				
8	Stand	dard control services pricing	45				
9	Stand	dard control services – tariff variations	54				
	9.1	Adjustments to tariffs within a regulatory year	54				
		9.1.1 ITC network tariffs	54				
		9.1.2 Changes to tariffs by network tariff class	54				
	9.2	Variations between the 2016-17 and 2017-18 regulatory years	55				
		9.2.1 Reallocation between fixed and variable costs	56				
		9.2.2 Rebalancing of DUoS and TUoS revenues	56				
10	Alter	native control services	57				
	10.1	Metering services	57				
		10.1.1 Overview of metering services	57				
		10.1.2 Setting the 2017-18 metering services tariffs	57				
		10.1.3 Prices for metering services	58				
	10.2	Public lighting services	58				
		10.2.1 Overview of public lighting services	59				
		10.2.2 Setting the 2017-18 public lighting services tariffs					
		10.2.3 Prices for public lighting services					
	10.3	Ancillary Service – fee based services					
		10.3.1 Overview					
		10.3.2 Setting the 2017-18 fee based services tariffs					
		10.3.3 Prices for fee based services					
	10.4	Ancillary Service – quoted services					
		10.4.1 Overview					
		10.4.2 Setting the 2017-18 quoted services tariffs					
		10.4.3 Labour prices for quoted services					
11	Custo	omer price impacts – alternative control services					
	11.1						
	11.2	5 5					
	11.3	Fee based services					
	11.4	Quoted services					
12	Alter	native control services – tariff variations	75				
	12.1	Changes to alternative control services pricing					
	12.2 Changes to alternative control services tariffs						
13	Compliance review						
14	Confidential information77						
15	Distri	ibution pricing proposal compliance obligations	78				
	15.1	Overview	78				



16	Attachments	. 85
17	Listing of tables	. 86
18	Glossary of terms/abbreviations	. 88





# 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)(1) of the National Electricity Rules (**Rules**) requires that TasNetworks submits an Annual Distribution Pricing Proposal to the AER within 15 business days after publication of the distribution determination for the first regulatory year of the regulatory control period.

Normally, a regulatory control period lasts for five years. Under a Rule change<sup>1</sup>, our forthcoming distribution regulatory control period will commence on 1 July 2017 and end on 30 June 2019. This 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 2017 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.<sup>2</sup>

TasNetworks also operates the transmission network in Tasmania which connects power stations and large generators, such as 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.

<sup>&</sup>lt;sup>1</sup> AEMC, Rule Determination: National Electricity Amendment (Aligning TasNetworks' regulatory control periods) Rule 2015, 9 April 2015.

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



# 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 2017-18 regulatory year, together with indicative tariffs for 2018-19. TasNetworks has established its classification of services, and tariff classes and tariff structure, with its Revised Tariff Structure Statement<sup>3</sup> (**TSS**) approved by the AER<sup>4</sup>.

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
- AER's distribution determination for TasNetworks.

#### 2.2 Structure

TasNetworks' Annual Distribution Pricing Proposal is structured as follows.

Section	Title	Purpose
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 which are related to each tariff. Also includes how customers are assigned to tariff classes based on the Rules and pricing principles. Applies to all direct control services (i.e. both standard control and alternative control services).
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 the regulated revenue.
5	Standard control services – compliance with regulatory requirements	Describes how the methodology used by TasNetworks complies with the Rules and also the requirements of the AER's distribution determination for TasNetworks.
6	Transmission charges	Outlines how adjustments to charges for transmission costs and any transmission costs resulting from overs and unders are calculated and recovered.
7	Standard control services – customer price impacts	Shows the difference in charges between 2016-17 and 2017-18 for each network tariff, as well as the percentage change.

#### Table 1:Structure of this document

<sup>&</sup>lt;sup>3</sup> TasNetworks Tariff Structure Statement – Formal Statement – April 2017 TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

<sup>&</sup>lt;sup>4</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.



Section	Title	Purpose			
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 2016-17 and 2017-18 regulatory years.			
10	Alternative control services	Explains the tariff classes applying to alternative control services and sets out the prices applying in 2017-18 to each of metering, public lighting, ancillary service – fee based services and ancillary service – 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 2017-18 regulatory year.			
13	Compliance review	Details the audit certification for the calculation of the tariffs applying to standard control services.			
14	Confidential information	Details which parts of this Annual Distribution Pricing Proposal are confidential and provides reasons in support of a confidentiality claim.			
15	Distribution pricing proposal compliance obligations	Sets out TasNetworks' compliance with the requirements of the Rules as they relate to annual distribution pricing proposals.			
16	Attachments	Lists the attachments to this Annual Distribution Pricing Proposal.			
17	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:<sup>5</sup>

- Network Tariff Application and Price Guide 2017-18;
- Metering Services Application and Price Guide 2017-18;
- Public Lighting Application and Price Guide 2017-18;
- Ancillary Service Fee Based Services Application and Price Guide 2017-18;
- Ancillary Service Quoted Services Application and Price Guide 2017-18; and
- Annual Distribution Pricing Proposal Overview 2017-18.

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

<sup>&</sup>lt;sup>5</sup> 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: <u>networktariff@tasnetworks.com.au</u>

#### 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 15 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 is outlined in section 19 of our Revised TSS<sup>6</sup>.

The Rules set out a range of requirements relating to tariff classes which have been addressed in our Revised TSS, specifically:

- Clause 6.18.3(b) Each customer for direct control services must be a member of one or more tariff classes.
  - 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.
- 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).
  - Tariff classes comprise only customers to whom standard control services are supplied, or alternative control services are supplied, but not both. That is, no tariff class comprises customers to whom both standard control services and alternative control services are supplied.
- 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.
  - We have grouped tariffs into tariff classes based on the need to group customers on an economically efficient basis that adequately reflects customer characteristics and has regard to 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 as they are low voltage installations for premises that are principally used as residential purposes.
- 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.
  - 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 three new time of use demand based network tariffs. The network tariff classes for standard control services are shown in Table 2.

<sup>&</sup>lt;sup>6</sup> TasNetworks Tariff Structure Statement – Formal Statement – April 2017 TasNetworks Tariff Structure Statement – Background and Explanation – April 2017





Network tariff class	Network tariff	Description		
Residential	Residential low voltage general ( <b>TAS31</b> )	This network tariff is for low voltage installations that are premise 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 ( <b>PAYG</b> ) 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. <b>This network tariff is obsolete, with no new connections allowed.</b>		
	Residential low voltage time of use demand ( <b>TAS87</b> )	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 ( <b>TAS92</b> )	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 configuration for the provision of the PAYG product.		
	(14352)	This network tariff is for low voltage installations that are premise used wholly or principally as private residential dwellings.		
	Residential low voltage time of use ( <b>TAS93</b> )	This time of use network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings.		
Small Low Voltage	Business low voltage general ( <b>TAS22</b> )	This is the basic, low voltage network tariff for installations that are not private residential dwellings.		
	Business low voltage nursing	This low voltage network tariff is applicable only to those businesses registered as aged care facilities.		
	homes ( <b>TAS34</b> )	This network tariff is obsolete, with no new connections allowed.		
	General network – business, curtilage	This network tariff is for rural customers having a single low voltage connection point but requiring more than one meter due to site layout.		
	(TASCURT)	The single connection point must supply an installation qualifying for and being supplied on the Business low voltage general network tariff (TAS22).		
		This network tariff is obsolete, with no new connections allowed.		
	Business low voltage time of use demand ( <b>TAS88</b> )	This low voltage time of use demand network tariff for installations that are not private residential dwellings.		
	Business low voltage time of use ( <b>TAS94</b> )	This is the basic, time of use low voltage network tariff for installations that are not private residential dwellings.		

Table 2:	Network tariff classes – standard control services





Network tariff class	Network tariff	Description			
Large Low Voltage	Business low voltage kVA demand ( <b>TAS82</b> )	This network tariff is for installations that are not private residential dwellings taking low voltage multi-phase supply.			
	Large business low voltage time of use demand ( <b>TAS89</b> )	This time of use demand network tariff is for installations that are not private residential dwellings taking low voltage multi-phase supply.			
Uncontrolled	Uncontrolled low	This network tariff is for low voltage installations.			
Energy	voltage heating ( <b>TAS41</b> )	In installations that are private residential dwellings, this network tariff:			
		<ul> <li>is for water heating and/or residential space heating and/or domestic indoor pool heating only.</li> </ul>			
		In installations that are not private residential dwellings, this network tariff:			
		• is for water heating only.			
Controlled Energy	Controlled low voltage energy –	This off-peak network tariff is for low voltage installations and includes an 'afternoon boost' component.			
	off peak with afternoon boost ( <b>TAS61</b> )	In installations that are private residential dwellings, this network tariff:			
		<ul> <li>is for water heating and/or residential space heating and/or other "wired in" appliances as approved by TasNetworks; and</li> </ul>			
		<ul> <li>may be used for heating swimming pools, including those that incorporate a spa. Note that an individual spa from which the water goes to waste after use may not be connected on this tariff.</li> </ul>			
		In installations that are not private residential dwellings, this network tariff:			
		<ul> <li>is for water heating and/or space heating and/or other "wired in" appliances as approved by TasNetworks.</li> </ul>			
	Controlled low voltage energy –	This network tariff is for low voltage installations and is only available during off-peak periods.			
	night period only ( <b>TAS63</b> )	In installations that are private residential dwellings, this network tariff:			
		<ul> <li>is for water heating and/or residential space heating and/or other circuits as approved by TasNetworks; and</li> </ul>			
		<ul> <li>may be used for heating swimming pools, including those that incorporate a spa. Note that an individual spa from which the water goes to waste after use may not be connected on this tariff.</li> </ul>			
		In installations that are not private residential dwellings, this network tariff:			
		<ul> <li>is for water heating and/or space heating and/or other circuits as approved by TasNetworks.</li> </ul>			





Network tariff class	Network tariff	Description			
Irrigation	Irrigation low voltage time of use ( <b>TAS75</b> )	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 ( <b>TASSDM</b> )	<ul> <li>This network tariff is for customers where:</li> <li>connection is made to this site at high voltage; and</li> <li>the expected Any Time Maximum Demand (ATMD) of the site is less than 2 MVA.</li> <li>Customers on this network tariff are able to agree with TasNetworks 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 no less than 12 months.</li> <li>A site connected to the TasNetworks distribution network with this network tariff is not eligible for any other network tariff.</li> </ul>			
	Business high voltage kVA specified demand >2MVA (TAS15)	<ul> <li>This network tariff is for customers where:</li> <li>connection is made to this site at high voltage; and</li> <li>the expected ATMD of the site is greater than 2 MVA.</li> <li>Customers on this network tariff are able to agree with</li> <li>TasNetworks a "Specified Demand" for their electrical installation.</li> <li>Once agreed this value is used in the calculation of NUOS charges for the following period of no less than 12 months.</li> <li>A site connected to the TasNetworks distribution network with this network tariff is not eligible for any other network tariff.</li> </ul>			
Individual Tariff Calculation	Individual tariff calculation (TASCUS1) (TASCUS2) (TASCUS3) (TASCUS4)	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 agents. ITC prices are based on actual TUOS charges for the relevant transmission connection point, plus charges associated with the actual shared distribution network utilised for the electricity supply, plus connection charges based on the actual connection assets utilised. This provides the greatest cost reflectivity for this type of customer and is feasible since the number of such customers is relatively small. Terms and conditions for these customers are contained within individually negotiated connection agreements.			





Network tariff class	Network tariff	Description
Unmetered	Unmetered supply low voltage general ( <b>TASUMS</b> )	<ul> <li>This network tariff is for small, low voltage, low demand installations with a relatively constant load profile. For example:</li> <li>illuminated street signs;</li> <li>public telephone kiosks;</li> <li>electric fences;</li> <li>two-way radio transmitters;</li> <li>fixed steady wattage installations;</li> <li>traffic lights; and</li> <li>level crossings.</li> <li>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.</li> </ul>
Street Lighting	Unmetered supply low voltage public lighting (TASUMSSL)	This network tariff is for customers that have a lighting service provided by TasNetworks. This network tariff does not include charges for the installation and/or replacement of lamps. Costs for the installation or replacement of lamps are an additional charge.
Embedded Generator	Residential low voltage import transitional (TASX1I)	<ul> <li>This network tariff is for the recording of 'export energy' for those residential installations that send energy into the distribution system and are eligible for the residential transitional feed-in tariff rate.</li> <li>Customer initiated changes to network tariff arrangements will result in ineligibility for the residential low voltage import transitional feed-in tariff rate. Customers ineligible for this tariff will be reassigned to TASX4I.</li> <li>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</li> <li>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.</li> </ul>
	Business low voltage import transitional (TASX2I)	<ul> <li>This network tariff is for the recording of 'export energy' for those commercial installations that send energy into the distribution system and are eligible for the business transitional feed-in tariff rate.</li> <li>Customer initiated changes to network tariff arrangements will result in ineligibility for the residential low voltage import transitional feed-in tariff rate. Customers ineligible for this tariff will be reassigned to TASX51.</li> <li>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</li> <li>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.</li> </ul>





Network tariff class	Network tariff	Description
	Residential low voltage import fair and reasonable	This network tariff is for the recording of 'export energy' for those residential installations that send energy into the distribution system and are eligible for the standard feed-in tariff rate.
	(TASX4I)	Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.
		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.
	Business low voltage import fair and reasonable	This network tariff is for the recording of 'export energy' for those commercial installations that send energy into the distribution system and are eligible for the standard feed-in tariff rate.
	(TASX5I)	Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.
		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.
	Non-qualifying import ( <b>TASX6I</b> )	This network tariff is for the recording of 'export energy' for those installations that send energy into the distribution system and are not eligible for any feed-in tariff arrangement.
		Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.
		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.

## **3.3** Tariff structure and charging parameters

TasNetworks' Revised TSS<sup>7</sup> 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 3.

<sup>&</sup>lt;sup>7</sup> TasNetworks Tariff Structure Statement – Formal Statement – April 2017 TasNetworks Tariff Structure Statement – Background and Explanation – April 2017



		Network Tariff charging (Parameter)				
Tariff class	Network tariff code	Daily charge (c/day)	Volume charge <sup>1</sup> (c/kWh)	Demand charge (c/kW/day)	Demand charge (c/kVA/day)	Specified demand charge (c/kVA/day)
	TAS31	$\checkmark$	$\checkmark$			
	TAS92	$\checkmark$	$\checkmark$			
Residential	TAS101	$\checkmark$	$\checkmark$			
	TAS87	~		<b>√</b> <sup>2</sup>		
	TAS93	$\checkmark$	<b>√</b> <sup>2</sup>			
	TAS22	$\checkmark$	$\checkmark$			
	TAS34	$\checkmark$	$\checkmark$			
Small Low Voltage	TASCURT	$\checkmark$	$\checkmark$			
Voltage	TAS88	$\checkmark$		<b>√</b> <sup>2</sup>		
	TAS94	$\checkmark$	<b>√</b> <sup>3</sup>			
Large Low	TAS82	$\checkmark$	$\checkmark$		$\checkmark$	
Voltage	TAS89	$\checkmark$			<b>√</b> <sup>2</sup>	
Uncontrolled Energy	TAS41	~	✓			
Controlled	TAS61	$\checkmark$	$\checkmark$			
Energy	TAS63	$\checkmark$	$\checkmark$			
Irrigation	TAS75	$\checkmark$	<b>√</b> <sup>3</sup>			
	TASSDM	~	<b>√</b> <sup>3</sup>			$\checkmark$
High Voltage	TAS15	~	<b>√</b> <sup>3</sup>			$\checkmark$
	TASCUS1	~	$\checkmark$			$\checkmark$
Individual Tariff	TASCUS2	~	$\checkmark$			$\checkmark$
Calculation	TASCUS3	~	<b>√</b> <sup>3</sup>			$\checkmark$
	TASCUS4	$\checkmark$	<b>√</b> <sup>3</sup>			✓
Unmetered	TASUMS	$\checkmark$	$\checkmark$			
Street Lighting	TASUMSSL		✓ <sup>4</sup>			
	TASX1I					
	TASX2I					
Embedded Generation <sup>5</sup>	TASX41					
	TASX5I					
	TASX6I					

#### Table 3: **Recovery of Distribution Use of System**

1 Volume charge can be a combination of step or time of use parameters.

These charges comprise both peak and off peak components. 2

3 These charges comprise peak, shoulder and off peak components.

- 4 Public lighting is charged on the basis of ¢/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 TasNetworks<sup>8</sup>. TUoS charges are allocated to network tariff classes using the Total Efficient Cost (**TEC**) model<sup>9</sup>. 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).

The network charging parameters adopted by TasNetworks for the recovery of standard control services TUoS tariffs are detailed in Table 4.

		Network Tariff charging (Parameter)				
Tariff class	Network tariff code	Daily charge (c/day)	Volume charge <sup>1</sup> (c/kWh)	Demand charge (c/kW/day)	Demand charge (c/kVA/day)	Specified demand charge (c/kVA/day)
Residential	TAS31		$\checkmark$			
	TAS92		$\checkmark$			
	TAS101		$\checkmark$			
	TAS88			<b>√</b> <sup>2</sup>		
	TAS93		<b>√</b> <sup>2</sup>			
Small Low Voltage	TAS22		$\checkmark$			
	TAS34		$\checkmark$			
	TASCURT		$\checkmark$			
	TAS88			<b>√</b> <sup>2</sup>		
	TAS94		<b>√</b> <sup>3</sup>			

#### Table 4: Recovery of Transmission Use of System

<sup>&</sup>lt;sup>8</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

<sup>&</sup>lt;sup>9</sup> See attachment PP001 to this Annual Distribution Pricing Proposal entitled 'TEC Methodology'.



		Network Tariff charging (Parameter)				
Tariff class	Network tariff code	Daily charge (c/day)	Volume charge <sup>1</sup> (c/kWh)	Demand charge (c/kW/day)	Demand charge (c/kVA/day)	Specified demand charge (c/kVA/day)
Large Low	TAS82		$\checkmark$		~	
Voltage	TAS89				<b>√</b> <sup>2</sup>	
Uncontrolled Energy	TAS41		V			
Controlled	TAS61		$\checkmark$			
Energy	TAS63		$\checkmark$			
Irrigation	TAS75		<b>√</b> <sup>3</sup>			
HV	TASSDM		<b>√</b> <sup>3</sup>			$\checkmark$
	TAS15					$\checkmark^4$
ITC	TASCUS1					$\checkmark^4$
	TASCUS2					$\checkmark^4$
	TASCUS3					✓ <sup>4</sup>
	TASCUS4					✓ <sup>4</sup>
Unmetered	TASUMS		$\checkmark$			
Street Lighting	TASUMSSL		✓ <sup>5</sup>			
Embedded Generation <sup>6</sup>	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 Demand charge is locational and based upon the transmission connection point.

5 Public lighting is charged on the basis of ¢/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 Revised TSS<sup>10</sup>, 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 5: Meter classes for metering services
- Table 6: Public lighting types for public lighting services
- Table 7: Contract lighting types for public lighting services

<sup>&</sup>lt;sup>10</sup> TasNetworks Tariff Structure Statement – Formal Statement – April 2017 TasNetworks Tariff Structure Statement – Background and Explanation – April 2017





- Table 8: Ancillary service fee based services
- Table 9: Ancillary service quoted services

# Table 5: 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.

Table 6:	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.





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





# Table 7: 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.
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. This lighting type is obsolete, with no new connections allowed.
80W mercury vapour	The maintenance of customer owned 80 watt mercury vapour light fittings. This lighting type is obsolete, with no new connections allowed.





Lighting type	Definition
80W mercury vapour – decorative	The maintenance of customer owned 80 watt mercury vapour light fittings.
	This lighting type is obsolete, with no new connections allowed.
125W mercury vapour	The maintenance of customer owned 125 watt mercury vapour light fittings.
	This lighting type is obsolete, with no new connections allowed.
250W mercury vapour	The maintenance of customer owned 250 watt mercury vapour light fittings.
	This lighting type is obsolete, with no new connections allowed.
400W mercury vapour	The maintenance of customer owned 400 watt mercury vapour light fittings.
	This lighting type is obsolete, with no new connections allowed.
1 x 20W fluorescent	The maintenance of customer owned 1 x 20 watt fluorescent light fittings.
	This lighting type is obsolete, with no new connections allowed.
2 x 20W fluorescent	The maintenance of customer owned 2 x 20 watt fluorescent light fittings.
	This lighting type is obsolete, with no new connections allowed.
1 x 40W fluorescent	The maintenance of customer owned 1 x 40 watt fluorescent light fittings.
	This lighting type is obsolete, with no new connections allowed.
2 x 40W fluorescent	The maintenance of customer owned 2 x 40 watt fluorescent light fittings.
	This lighting type is obsolete, with no new connections allowed.
3 x 40W fluorescent	The maintenance of customer owned 3 x 40 watt fluorescent light fittings.
	This lighting type is obsolete, with no new connections allowed
4 x 40W fluorescent	The maintenance of customer owned 4 x 40 watt fluorescent light fittings.
	This lighting type is obsolete, with no new connections allowed.
4 x 20W fluorescent	The maintenance of customer owned 4 x 20 watt fluorescent light fittings.
	This lighting type is obsolete, with no new connections allowed.
60W incandescent	The maintenance of customer owned 60 watt incandescent light fittings.
	This lighting type is obsolete, with no new connections allowed.
100W incandescent	The maintenance of customer owned 100 watt incandescent light fittings.
	This lighting type is obsolete, with no new connections allowed.





Table 8:	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.	
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.	





Service	Description	
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.	
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.	





Service	Description	
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 charge	es	
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.	
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.	





Service	Description	
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 charg	es	
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.	
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: • new consumer mains –	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	
<ul> <li>new consumer mains – overhead supply</li> <li>new consumer mains –</li> </ul>	TasNetworks while this basic connection service is being provided.	
<ul><li>underground to pole</li><li>changeover new consumer</li></ul>		
<ul><li>mains to new private pole</li><li>changeover overhead service</li></ul>		
to new point of attachment		





Service	Description
Connection alteration – overhead multi-phase Includes:	A visit to a customer's premises during operation hours for a multi-phase connection alteration following an alteration to the customer's installation.
<ul> <li>new consumer mains – overhead supply</li> </ul>	The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.
<ul> <li>new consumer mains –</li> </ul>	
<ul> <li>underground to pole</li> </ul>	
<ul> <li>changeover new consumer mains to new private pole</li> </ul>	
changeover overhead service to new point of attachment	
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.
Connection of new consumer mains to an existing installation – underground multi-phase to turret or pole	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.
	The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.
Augment single phase overhead service to multi-phase supply	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.
	The existing single phase overhead service wire must be removed and not reused.
	The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided. This service requires a connection application.
Augment multi-phase overhead service to single phase supply	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.
	The existing multi-phase overhead service wire will be removed and not reused.
	The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.
	This service requires a connection application.





Service	Description
Augment single phase overhead service to underground supply (turret)	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.
	The existing single phase overhead service wire will be removed and not reused.
	The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.
	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.
	This service requires a connection application.
Augment single phase overhead service to underground supply (pole)	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.
	The existing single phase overhead service wire will be removed and not re-used.
	The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.
	This service requires a connection application.
Augment multi-phase overhead service to underground supply (pole)	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.
	The existing multi-phase overhead service wire will be removed and not reused.
	The customer's supply of electricity will be interrupted by TasNetworks while this basic connection service is being provided.
	This service requires a connection application.
Basic connection alteration – after hours	A visit to a customer's premises outside operational hours to perform basic connection alteration.

# Table 9: Ancillary service – quoted services

Service	
New de	esign and construction fees
•	Standard application fee
•	Application fee





#### Service

Maximum service:

- 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)

#### Minimum service:

- 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)

#### 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 Revised TSS<sup>11</sup> 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 determination<sup>12</sup>, TasNetworks' Annual Distribution Pricing Proposal must contain provision for a system of assessment and review of the basis on which a

<sup>11</sup> TasNetworks Tariff Structure Statement – Formal Statement - April 2017 TasNetworks Tariff Structure Statement – Background and Explanation – April 2017





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 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 three new time of use demand tariffs. As discussed in our Revised TSS<sup>13</sup> 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.

<sup>12</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.
 <sup>13</sup> TasNetworks Tariff Structure Statement – Formal Statement – April 2017

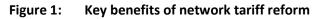
TasNetworks Tariff Structure Statement – Background and Explanation – April 2017

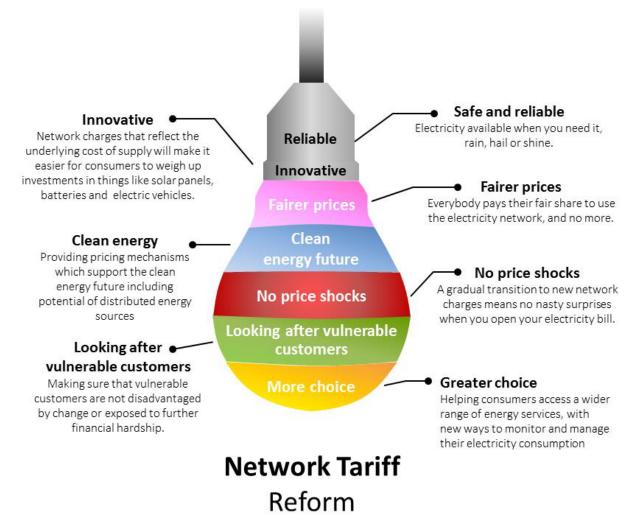




# 4 Pricing principles

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





#### 4.1 Overview

TasNetworks' Revised TSS<sup>14</sup> 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.

<sup>&</sup>lt;sup>14</sup> TasNetworks Tariff Structure Statement – Background and Explanation – April 2017





- **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.

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 Revised TSS<sup>15</sup> 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 Revised TSS<sup>15</sup>.

#### 4.3 Stand-alone and avoidable costs – standard control services

TasNetworks' Revised TSS<sup>15</sup> 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 Revised TSS<sup>15</sup>.

Table 10 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.

Network tariff class	Avoidable cost (\$m)	Expected revenue (\$m) <sup>*</sup>	Stand-alone cost (\$m)
Individual Tariff Calculation	0.047	1.420	216.946
High Voltage	0.582	6.748	217.458
Irrigation	0.621	5.382	217.520
Large Low Voltage	1.709	18.752	218.607
Small Low Voltage	3.196	54.608	218.441
Residential	7.649	109.854	223.193
Uncontrolled Energy	0.000	29.993	216.900
Controlled Energy	0.000	1.489	216.900
Unmetered	0.021	0.800	216.920
Street Lighting	0.109	1.660	217.009
Embedded Generation <sup>#</sup>	n.a.	n.a.	n.a.

#### Table 10: Stand-alone and avoidable cost boundaries 2017-18

\* The expected revenue excludes side constraint adjustments.

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

<sup>&</sup>lt;sup>15</sup> TasNetworks Tariff Structure Statement – Background and Explanation – April 2017



#### 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.

#### 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 Revised TSS<sup>16</sup> sets out our approach to estimating LRMC using the average incremental cost method.

Table 11 sets out the LRMC estimates using the methodology in our Revised TSS<sup>16</sup>.

Network tariff class	Network tariff	Long run marginal cost (\$/kW)	
		2017-18	2018-19
High Voltage	Business High Voltage kVA Specified Demand (TASSDM)	70	
High Voltage	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 General (TAS22)	165	

 Table 11:
 Estimated long run marginal costs

<sup>16</sup> 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	5
	Business Low Voltage Time of Use (TAS94)	129	)
	Residential Time of Use Demand Tariff (TAS87)	182	2
Residential	Residential Low Voltage General (TAS31)	182	
	Residential Low Voltage PAYG (TAS101)	182	2
	Residential Low Voltage PAYG Time of Use (TAS92)	182	2
	Residential Low Voltage Time of Use (TAS93)	182	2
Uncontrolled Energy	Uncontrolled Low Voltage Heating (TAS41)	122	2
Controlled Energy	Controlled Low Voltage Energy – Off Peak with afternoon boost (TAS61)	146	
	Controlled Low Voltage Energy – Night period only (TAS63)	146	5
Unmetered	Unmetered Supply Low Voltage General (TASUMS)	167	7
Street Lighting	Unmetered Supply Low Voltage Public Lighting (TASUMSSL)	167	

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 LRMC 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 Revised TSS<sup>17</sup> outlines the network tariff reforms we are implementing. Our reforms and impacts on customers are discussed in the Revised TSS<sup>17</sup> in sections 14 and 15.7, and further in section 9 (for standard control services) and section 12 (for alternative control services).

<sup>&</sup>lt;sup>17</sup> TasNetworks Tariff Structure Statement – Background and Explanation – April 2017



## 5 Standard control services – compliance with regulatory 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 2017-18 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 TasNetworks<sup>18</sup>, 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:

Revenu	Revenue cap formula					
1	$TAR_t \geq \sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_t^{ij}$	i = 1,,n and j = 1,,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				
4	$AAR_{t} = AAR_{t-1}(1 + \Delta CPI_{t})(1 - X_{t})(1 + S_{t})$	t = 2				

#### Table 12 Revenue cap formula

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.

<sup>&</sup>lt;sup>18</sup> 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**<sub>t</sub> is the sum of the following annual adjustment factors for year t:
  - $\circ$  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 13 Electrical Safety Inspection Service Charge

#### **Electrical Safety Inspection Service Charge**

 $ESISC_{t} = (ESISCa_{t-1} - ESISCe_{t-1}) \times WACC_{t}$ 

where:

FCICC	is the entry of Floretziand Cofety, June options Compiler shows a feature at 1
ESISCa <sub>t-1</sub>	is the actual Electrical Safety Inspection Service charge for year t-1.

- **ESISCe**<sub>t-1</sub> is the estimated Electrical Safety Inspection Service charge for year t–1 as determined by the AER.
- **WACC**<sub>t</sub> is the approved nominal weighted average cost of capital (**WACC**) for the relevant regulatory year using the following method:

#### Table 14 Nominal vanilla WACC

Nominal vanilla WACC<sub>t</sub>

Nominal vanilla WACC<sub>t</sub> =  $((1 + real vanilla WACC_t) \times (1 + \Delta CPI_t)) - 1$ 

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 15 National Energy Market Charge

National Energy Market Charge
$NEMC_{t} = (NEMCa_{t-1} - NEMCe_{t-1}) \times WACC_{t}$

where:

where.	
NEMCa <sub>t-1</sub>	is the actual National Energy Market charge for year t–1.
NEMCe <sub>t-1</sub>	is the estimated National Energy Market charge for year t-1 as determined by the AER.
WACC <sub>t</sub>	is the approved nominal weighted average cost of capital ( <b>WACC</b> ) 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.
$\Delta CPI_t$	is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight
ĩ	Capital Cities from the December quarter in year t–2 to the December quarter in year t– 1.
X <sub>t</sub>	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.





St 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 16 provides details of the Revenue Cap calculation that TasNetworks has utilised in the preparation of its network tariffs.

Criteria	<b>2017 value</b> (\$m)
AAR <sub>t</sub>	237.764
ΔCPI <sub>t</sub>	0.000
S <sub>t</sub>	1.981
I <sub>t</sub>	0.000
B <sub>t</sub>	(6.687)
Ct	0.000
$TAR_{t} = AAR_{t} + I_{t} + B_{t} + C_{t}$	231.077

Table 16: Total allowable revenue

#### 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 downward trend in consumption. While there has been a reversal of this decline in the past 12 months, it remains to be seen whether this an ongoing shift in consumption. As a result, the energy consumption forecasts which underpin this Annual Distribution Pricing Proposal anticipate a further, small decline in consumption, but at a lesser rate than forecast in recent years.

The 2017-18 energy consumption forecast is for a total consumption of 4,096 GWh. This forecast is 0.36 per cent lower than TasNetworks' forecast for its 2016-17 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 TasNetworks<sup>19</sup>, 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 Compliance with 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.

For TasNetworks the 2017-18 regulatory year is the first year in the regulatory period so, in accordance with clause 6.18.6(b) of the Rules, the side constraint formula does not apply for the 2017-18 year.

The indicative pricing for 2018-19 indicates that the side constraint is likely to be breached in that year for the majority of tariff classes except Controlled energy, Irrigation, Unmetered supply, and ITCs. This is due to an over-recovery from 2016-17 being passed on to customers in 2017-18 pushing down revenue for that year but this adjustment is not accounted for in the side constraint formula.

#### 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 17 sets out the expected weighted average of revenue for 2016-17 and 2017-18.

<sup>&</sup>lt;sup>19</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.





Table 17:     Weighted average revenue						
Tariff class	Weighted average revenue 2016-17 (\$m)	Anticipated revenue 2017-18 (\$m)	Change (%)			
ITC	5.044	4.302	(14.7%)			
High Voltage	12.013	9.455	(21.3%)			
Irrigation	7.836	6.637	(15.3%)			
Large Low Voltage	38.370	30.127	(21.5%)			
Small Low Voltage	98.234	75.050	(23.6%)			
Residential	169.906	137.773	(18.9%)			
Uncontrolled Energy	49.678	54.300	9.3%			
Controlled Energy	1.773	1.894	6.8%			
Unmetered	1.297	0.985	(24.1%)			
Street Lighting	2.982	2.352	(21.1%)			

#### 5.5 2017-18 pricing and indicative prices provided in the TSS

Our Revised TSS<sup>20</sup> outlines the assumptions we used to forecast indicative network use of system (NUoS) prices. These assumptions have changed from the time of submitting our Revised TSS<sup>20</sup> to receiving our final determination. The differences between our indicative 2017-18 NUoS prices and our pricing proposal prices are predominately driven by changes to total allowable revenue (as identified in Table 18) including:

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

Table 18:	Changes in assumptions for indicative pricing to pricing proposal
-----------	---

Assumptions	<b>Revised TSS</b> (\$m)	Pricing Proposal (\$m)	Variance (\$m)
Annual Smoothed Revenue	226.290	235.783	9.493
S-Factor	0.000	1.981	1.981
I-Factor	0.000	0.000	0.000
B-Factor	0.000	(6.687)	(6.687)
C-Factor	0.000	0.000	0.000
Charges paid to TNSP	95.410	95.092	(0.318)
TUOS Unders and overs amount	0.000	(3.055)	(3.055)

In addition, minor refinements to our demand and consumption forecasts for 2017-18 have flowed through to NUoS prices.

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





Further to this, the strategy outlined in our Revised TSS included realigning tariffs to remove historical cross-subsidies, including the discount for our Uncontrolled Low Voltage Heating tariff (TAS41). Our strategy is to gradually, over time, align the Uncontrolled Low Voltage Heating tariff (TAS41) to the Residential Low Voltage General (TAS31). The significant reduction in allowable revenue in 2017-18 provided scope to progress the tariff alignment while still placing downward pressure on network charges. Progressing tariff alignment means that while TAS41 increases, TAS31 correspondingly decreases. For example, the Revised TSS indicated the NUoS variable charge for the TAS41 would increase by 25 per cent from 2016-17, while the variable charge for TAS31 would decrease by 27 per cent from 2016-17.

There was concern from our shareholders that the proposed level of price movement in TAS41 did not align with the shareholders' view of community expectations in respect to the required transition pace. Therefore, at the request of our shareholders, we have reduced the price movement for TAS41. The reduction in the price movement for TAS41 results in corresponding changes to other network tariffs, with these changes consistent with the TSS strategy.

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 out 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 Compliance with 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 Revised TSS<sup>21</sup> 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 Revised TSS<sup>21</sup>.

<sup>&</sup>lt;sup>21</sup> TasNetworks Tariff Structure Statement – Background and Explanation – April 2017



## 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 2017-18

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 19 provides the difference in the charges between 2016-17 and 2017-18 for each network tariff component.

Network tariff class	Network tariff	Network tariff component	<b>Charge</b> <b>2016-17</b> (cents)	Charge 2017-18 (cents)	Change (%)
High Voltage	TAS15	Service charge	2,475.500	2,543.800	2.8%
		Peak energy	1.897	0.998	(47.4%)
		Shoulder energy	0.514	0.599	16.5%
		Off-peak energy	0.065	0.149	129.2%
		Specified demand	12.054	8.351	(30.7%)
		Excess demand	60.270	41.755	(30.7%)
		Connection specified demand	0.438	0.303	(30.8%)
		Excess connection specified demand	2.190	1.516	(30.8%)
	TASSDM	Service charge	186.788	280.685	50.3%
		Peak energy	1.243	1.463	17.7%
		Shoulder energy	0.938	0.878	(6.4%)
		Off-peak energy	0.525	0.219	(58.3%)
		Specified demand	24.280	18.755	(22.8%)
		Excess demand	242.796	187.552	(22.8%)
Irrigation	TAS75	Service charge	230.006	230.294	0.1%
		Peak energy	15.553	10.365	(33.4%)
		Shoulder energy	9.535	6.219	(34.8%)
		Off-peak energy	1.505	1.555	3.3%
Large Low	TAS82	Service charge	244.704	285.917	16.8%
Voltage		Energy charge	2.925	2.486	(15.0%)
		Demand charge	47.792	34.721	(27.3%)
	TAS89	Service charge	n.a.	427.103	n.a.
		Peak demand	n.a.	51.484	n.a.
		Off-peak demand	n.a.	17.143	n.a.

 Table 19:
 Network tariff classes – percentage price change





Network tariff class	Network tariff	Network tariff component	Charge 2016-17 (cents)	Charge 2017-18 (cents)	Change (%)
Small Low	TAS22	Service charge	47.864	48.180	0.7%
Voltage		Energy charge	14.168	10.031	(29.2%)
	TAS34	Service charge	47.864	48.180	0.7%
		1 <sup>st</sup> 500kWh energy	14.168	10.031	(29.2%)
		Remaining energy	8.904	9.642	8.3%
	TASCURT	Service charge	36.695	40.472	10.3%
		Energy charge	14.168	10.031	(29.2%)
	TAS88	Service charge	n.a.	64.926	n.a.
		Peak demand	n.a.	58.432	n.a.
		Off-peak demand	n.a.	19.459	n.a.
	TAS94	Service charge	48.844	57.368	17.5%
		Peak energy	13.901	10.700	(23.0%)
		Shoulder energy	8.876	6.422	(27.6%)
		Off-peak energy	1.554	1.605	3.3%
Residential	TAS31	Service charge	47.864	47.864	0.0%
		Energy charge	14.168	10.152	(28.3%)
	TAS101	Service charge	47.864	47.864	0.0%
		Energy charge	8.301	7.917	(4.6%)
	TAS87	Service charge	n.a.	54.538	n.a.
		Peak demand	n.a.	36.228	n.a.
		Off-peak demand	n.a.	12.064	n.a.
	TAS93 / TAS92	Service charge	47.864	53.581	11.9%
		Peak energy	19.020	17.679	(7.1%)
		Off-peak energy	2.811	3.090	9.9%
Uncontrolled	TAS41	Service charge	5.183	5.538	6.8%
Energy		Energy charge	5.302	5.806	9.5%
Controlled	TAS61	Service charge	9.716	11.252	15.8%
Energy		Energy charge	1.715	1.692	(1.3%)
	TAS63	Service charge	9.716	11.252	15.8%
		Energy charge	1.362	1.467	7.7%
Unmetered	TASUMS	Service charge	47.864	48.180	0.7%
		Energy charge	18.245	11.951	(34.5%)
Street Lighting	TASUMSSL	Demand charge	0.142	0.112	(21.1%)





Table 20 provides the difference in the charges between 2016-17 and 2017-18 for each  $ITC^{22}$  network tariff component.

Network tariff class	NMI / Tariff	Network tariff component	DUoS charge 2016-17 (cents)	DUoS charge 2017-18 (cents)	Change (%)
Individual	Individual	Service charge			
Tariff Calculation	Tariff Calculation	Specified connection			
		Excess connection			
	Individual	Service charge			
	Tariff Calculation	Energy charge			
		Specified connection			
		Excess connection	_		
		Specified demand	_		
		Excess demand			
	Individual	Service charge			
	Tariff Calculation	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	Service charge			
	Tariff Calculation	Energy charge			
		Specified connection			
		Excess connection			
		Specified demand			
		Excess demand			

 Table 20:
 ITC tariffs – percentage price change

<sup>&</sup>lt;sup>22</sup> ITC network tariff rates are confidential.



Network tariff class	NMI / Tariff	Network tariff component	DUoS charge 2016-17 (cents)	DUoS charge 2017-18 (cents)	Change (%)
Individual	Individual	Service charge			
Tariff Calculation	Tariff Calculation	Energy charge			
		Specified connection			
		Excess connection			
		Specified demand			
		Excess demand			
	Individual	Service charge			
	Tariff Calculation	Peak energy			
	Calculation	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			
	Calculation	Shoulder energy			
		Off-peak energy			
		Specified demand			
		Excess demand			
High Voltage	TAS15	Service charge	2,475.500	2,543.800	2.8%
		Peak energy	1.897	0.998	(47.4%)
		Shoulder energy	0.514	0.599	16.5%
		Off-peak energy	0.065	0.149	129.2%
		Specified demand	12.054	8.351	(30.7%)
		Excess demand	60.270	41.755	(30.7%)
		Specified connection	0.438	0.303	(30.8%)
		Excess connection	2.190	1.516	(30.8%)





Table 21 provides the difference in the charges between 2016-17 and 2017-18 for each locational TUoS charge.

Transmission node description	Transmission node identifier	TUoS charge 2016-17 (c/kVA/day)	TUoS charge 2017-18 (c/kVA/day)	Change (%)
Arthurs Lake	TAL2	17.644	17.768	0.7%
Avoca	TAV2	19.097	17.655	(7.6%)
Burnie	TBU3	16.978	16.113	(5.1%)
Bridgewater	TBW2	19.368	17.556	(9.4%)
Derwent Bridge	TDB2	288.705	184.649	(36.0%)
Derby	TDE2	38.322	41.898	9.3%
Devonport	TDP2	19.010	18.135	(4.6%)
Emu Bay	TEB2	23.312	21.582	(7.4%)
Electrona	TEL2	20.371	25.401	24.7%
Huon River	THR2	n.a.	45.384	n.a.
Kermandie	TKE2	40.419	34.091	(15.7%)
Kingston 11kV	ТКІ2	21.035	18.483	(12.1%)
Kingston 33kV	ТКІЗ	18.808	22.464	19.4%
Knights Road	TKR2	22.955	23.866	4.0%
Lindisfarne	TLF2	15.440	17.661	14.4%
Meadowbank	TMB2	18.626	18.134	(2.6%)
New Norfolk	TNN2	20.462	19.691	(3.8%)
Newton	TNT2	43.413	44.174	1.8%
Port Latta	TPL2	20.241	21.131	4.4%
Palmerston	ТРМЗ	20.235	18.460	(8.8%)
Queenstown	TQT2	29.813	29.574	(0.8%)
Railton	TRA2	18.522	17.837	(3.7%)
Rosebery	TRB2	16.976	16.243	(4.3%)
Scottsdale	TSD2	40.286	40.708	1.0%
St Marys	TSM2	27.378	26.025	(4.9%)
Sorell	TSO2	23.883	22.410	(6.2%)
Savage River	TSR2	25.758	17.190	(33.3%)
Smithton	TST2	26.339	25.604	(2.8%)
Triabunna	TTB2	29.087	32.480	11.7%
Tungatinah	TTU2	73.216	58.553	(20.0%)
Ulverstone	TUL2	16.923	17.651	4.3%
Waddamana	TWA2	33.336	31.681	(5.0%)

 Table 21:
 Locational TUoS charges – percentage price change





Transmission node description	Transmission node identifier	TUoS charge 2016-17 (c/kVA/day)	TUoS charge 2017-18 (c/kVA/day)	Change (%)
Wesley Vale	TWV2	39.413	629.713	1,497.7% <sup>1</sup>
Hobart Virtual	TVN1	18.813	17.991	(4.4%)
Tamar Virtual	TVN2	15.905	15.190	(4.5%)

1 The large increase for Wesley Vale reflects the contract demand for this connection reducing from 1.9 MW in 2016-17 to 100 kW in 2017-18. 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 2017-18 are outlined in Table 22.

The proposed DUoS charges for each of TasNetworks' 2017-18 individual tariff calculation<sup>23</sup> and business high voltage kVA specified demand (> 2 MVA) network tariffs are outlined in Table 23.

The proposed TUoS charges for each of TasNetworks' 2017-18 network tariffs are outlined in Table 24.

The proposed TUoS charges for each of TasNetworks' 2017-18 individual tariff calculation<sup>24</sup> and business high voltage kVA specified demand (> 2 MVA) network tariffs are outlined in Table 25.

The proposed locational TUoS charges that are applicable to TasNetworks' 2017-18 ITC and business high voltage kVA specified demand (> 2 MVA) network tariffs are outlined in Table 26.

<sup>&</sup>lt;sup>24</sup> ITC network tariff rates are confidential.



<sup>&</sup>lt;sup>23</sup> ITC network tariff rates are confidential.



### Table 22: 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
Residential low voltage general	TAS31	47.864				7.393						
Business low voltage general	TAS22	48.180				7.272						
Business low voltage nursing homes	TAS34	48.180				7.272	6.883					
General network – business, curtilage	TASCURT	40.472				7.272						
Uncontrolled low voltage heating	TAS41	5.538				3.047						
Controlled low voltage energy off-peak with afternoon boost	TAS61	11.252				1.005						
Controlled low voltage energy with night period only	TAS63	11.252				0.907						
Unmetered supply low voltage general	TASUMS	48.180				8.202						
Irrigation low voltage time of use	TAS75	230.294	6.746	4.048	1.012							
Business low voltage kVA demand	TAS82	285.917				1.720		19.032				
Business high voltage kVA specified demand	TASSDM	280.685	0.307	0.184	0.046						14.668	146.679
Residential low voltage pay as you go	TAS101	47.864				6.057						
Residential low voltage pay as you go time of use	TAS92	53.581	12.508		2.184							
Residential low voltage time of use	TAS93	53.581	12.508		2.184							
Business low voltage time of use	TAS94	57.368	7.433	4.461	1.115							
Unmetered supply low voltage public lighting	TASUMSSL							0.082 <sup>2</sup>				
Residential time of use kW demand	TAS87	54.538							25.367	8.447		





			Di	istribution Us	e 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 low voltage time of use kW demand	TAS88	64.926							40.399	13.453		
Business low voltage time of use kVA demand large	TAS89	427.103							27.743	9.238		
Residential low voltage import transitional <sup>1</sup>	TASX1I											
Business low voltage import transitional <sup>1</sup>	TASX2I											
Residential low voltage import fair and reasonable <sup>1</sup>	TASX4I											
Business low voltage import fair and reasonable <sup>1</sup>	TASX5I											
Non-qualifying import <sup>1</sup>	TASX6I											

There are no charges for these network tariffs. c/lamp watt/day 1

2





	Distribution Use of System rates									
Tariff description	Network Tariff code	charge		Energ c/k	y rate Wh			on charge A/day	Capacity charges c/kVA/day	
	Tariff code	\$/day	Peak	Shoulder	Off-peak	All energy	Specified	Excess	Specified	Excess
Business high voltage kVA specified demand (> 2MVA)	TAS15	25.438	0.998	0.599	0.149		0.303	1.516	8.351	41.755
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									

# Table 23: DUoS charges – standard control services (ITC customers)<sup>25</sup>

<sup>25</sup> ITC network tariff rates are confidential.





### Table 24: TUoS charges – standard control services

	Transmission Use of System rates											
Network tariff description	Network tariff code	Daily charge c/day	т	oU energy ra c/kWh	ite	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 general	TAS31					2.759						
Business low voltage general	TAS22					2.759						
Business low voltage nursing homes	TAS34					2.759	2.759					
General network – business, curtilage	TASCURT					2.759						
Uncontrolled low voltage heating	TAS41					2.759						
Controlled low voltage energy off-peak with afternoon boost	TAS61					0.687						
Controlled low voltage energy with night period only	TAS63					0.560						
Unmetered supply low voltage general	TASUMS					3.749						
Irrigation low voltage time of use	TAS75		3.619	2.171	0.543							
Business low voltage kVA demand	TAS82					0.766		15.689				
Business high voltage kVA specified demand	TASSDM		1.156	0.694	0.173						4.087	40.873
Residential low voltage pay as you go	TAS101					1.860						
Residential low voltage pay as you go time of use	TAS92		5.171		0.906							
Residential low voltage time of use	TAS93		5.171		0.906							
Business low voltage time of use	TAS94		3.267	1.961	0.490							
Unmetered supply low voltage public lighting	TASUMSSL							0.030 <sup>2</sup>				
Residential time of use kW demand	TAS87								10.861	3.617		





	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 low voltage time of use kW demand	TAS88								18.033	6.006		
Business low voltage time of use kVA demand large	TAS89								23.741	7.905		
Residential low voltage import transitional <sup>1</sup>	TASX1I											
Business low voltage import transitional <sup>1</sup>	TASX2I											
Residential low voltage import fair and reasonable <sup>1</sup>	TASX4I											
Business low voltage import fair and reasonable <sup>1</sup>	TASX5I											
Non-qualifying import <sup>1</sup>	TASX6I											

There are no charges for these tariffs. c/Lamp watt/day 1

2





Table 25:	TUoS – standard cor	ntrol services (ITC customers) <sup>2</sup>	5
-----------	---------------------	---	---

	Transmission Use of System rates									
Tariff description	Network tariff	charge	ToU energy rate c/kWh				ergy rates (Wh	Demand rates	Capacity charges c/kVA/day	
· · · · · · · · · · · · · · · · · · ·	code	c/day	Peak	Shoulder	Off-peak	Step 1	Remaining	c/kVA (kW)/day	Specified	Excess
Business high voltage kVA specified demand (> 2MVA)	TAS15								Locational	Locational
Individual tariff calculation	TASCUS1								Locational	Locational
Individual tariff calculation	TASCUS3								Locational	Locational
Individual tariff calculation	TASCUS4								Locational	Locational

<sup>26</sup> ITC network tariff rates are confidential.





Transmission node description	Transmission node identifier	Daily charge c/kVA/day
Arthurs Lake	TAL2	17.768
Avoca	TAV2	17.655
Burnie	TBU3	16.113
Bridgewater	TBW2	17.556
Derwent Bridge	TDB2	184.649
Derby	TDE2	41.898
Devonport	TDP2	18.135
Emu Bay	TEB2	21.582
Electrona	TEL2	25.401
Huon River	THR2	45.384
Kermandie	TKE2	34.091
Kingston 11KV	TKI2	18.483
Kingston 33KV	ТКІЗ	22.464
Knights Road	TKR2	23.866
Lindisfarne	TLF2	17.661
Meadowbank	TMB2	18.134
New Norfolk	TNN2	19.691
Newton	TNT2	44.174
Port Latta	TPL2	21.131
Palmerston	ТРМ3	18.460
Queenstown	TQT2	29.574
Railton	TRA2	17.837
Rosebery	TRB2	16.243
Scottsdale	TSD2	40.708
St Marys	TSM2	26.025
Sorell	TSO2	22.410
Savage River	TSR2	17.190
Smithton	TST2	25.604
Triabunna	TTB2	32.480
Tungatinah	TTU2	58.553
Ulverstone	TUL2	17.651
Waddamana	TWA2	31.681
Wesley Vale	TWV2	629.713 <sup>1</sup>
Hobart Virtual	TVN1	17.991
Tamar Virtual	TVN2	15.190

#### Table 26: Locational TUoS charges – standard control services





1 The large increase for Wesley Vale reflects a much lower contract demand.

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 26 for this VTN is TVN1.

 Table 27:
 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 26 for this VTN is TVN2.

#### Table 28: 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 2017-18. 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 2017-18, in line with the methodology set out in this Annual Distribution Pricing Proposal.

#### 9.1.2 Changes to tariffs by network tariff class

Our Revised TSS<sup>27</sup> outlines our tariff strategy for the 2017-19 regulatory period, with Table 29 outlining the key tariff reforms we are implementing

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	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). 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

#### Table 29: Networks tariff reforms

<sup>&</sup>lt;sup>27</sup> 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	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.
		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.
New demand network tariffs	Introducing three new time of use demand based network	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.
	tariffs	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.
		Through the transition we will work to build customer understanding about demand based network tariffs.

Table 30 shows the percentage change of the average DUoS, TUoS and overall NUoS price for each tariff class for 2016-17 to 2017-18

Tariff Class	DUoS price movement (%)	TUoS price movement (%)	NUoS price movement (%)
ITC	(34.2%)	(5.4%)	(14.7%)
High Voltage	(31.4%)	24.8%	(21.3%)
Irrigation	(16.8%)	(8.1%)	(15.3%)
Large Low Voltage	(31.7%)	4.6%	(21.5%)
Small Low Voltage	(28.4%)	(6.6%)	(23.6%)
Residential	(21.3%)	(6.2%)	(18.9%)
Uncontrolled Energy	17.8%	0.1%	9.3%
Controlled Energy	9.7%	(3.5%)	6.8%
Unmetered	(26.7%)	(10.2%)	(24.1%)
Street Lighting	(26.8%)	0.0%	(21.1%)

Table 30:	Weighted average price movement by Tariff Class
-----------	---

## 9.2 Variations between the 2016-17 and 2017-18 regulatory years

TasNetworks' total revenue for standard control services has decreased by approximately 17.7 per cent between 2016-17 and 2017-18, while the consumption of electricity by customers of those services is expected to be approximately 0.36 per cent lower.





TasNetworks has adopted the following general strategies in setting its network tariffs for 2017-18 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 decrease in revenue for 2017-18 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 2017-18 we are offering three new time of use demand tariffs, which are opt-in only.

#### 9.2.1 Reallocation between fixed and variable costs

In line with our tariff strategy we have increased out fixed service costs in line with our indicative pricing schedule as set out in the Revised TSS<sup>28</sup>.

#### 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.

<sup>&</sup>lt;sup>28</sup> TasNetworks Tariff Structure Statement – Formal Statement – April 2017 TasNetworks Tariff Structure Statement – Background and Explanation – April 2017





## **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 TasNetworks<sup>29</sup> 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 5 in Section 3.4 above.

#### 10.1.2 Setting the 2017-18 metering services tariffs

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

The 2017-18 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 TasNetworks<sup>30</sup>. 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 TasNetworks<sup>31</sup>:

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

Table 31 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its metering services tariffs.

<sup>&</sup>lt;sup>29</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

<sup>&</sup>lt;sup>30</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

<sup>&</sup>lt;sup>31</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.



#### Table 31: Price cap calculation – metering services

Component	Value	Comment
$\overline{p}_i^t$	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.
$\overline{P}_{t-1}^i$	Various	The cap on the price of service i in year t-1.
$\Delta CPI_t$		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.
		The 'X' factor as specified in the AER's distribution determination for TasNetworks.

#### 10.1.3 Prices for metering services

The proposed 2017-18 prices for each of TasNetworks' metering services tariffs are outlined in Table 32.

Table 32:	Tariffs for metering services
-----------	-------------------------------

Tariff		Price (c/day)	Annual charge (\$)
Domestic LV – single phase	Capital	3.192	11.65
	Non-capital	2.894	10.56
Domestic LV – multi phase	Capital	6.624	24.18
	Non-capital	6.006	21.92
Domestic LV – CT meters	Capital	8.198	29.92
	Non-capital	7.432	27.13
Business LV – single phase	Capital	3.302	12.05
	Non-capital	2.994	10.93
Business LV – multi phase	Capital	6.605	24.11
	Non-capital	5.989	21.86
Business LV – CT meter	Capital	8.541	31.17
	Non-capital	7.744	28.27
Other – T09	Capital	5.829	21.28
	Non-capital	5.285	19.29

#### **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 6 and Table 7 of section 3.4 above.

#### 10.2.2 Setting the 2017-18 public lighting services tariffs

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

The 2017-18 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 TasNetworks<sup>32</sup>.

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 TasNetworks<sup>33</sup>:

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

Table 33 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its public lighting tariffs.

<sup>&</sup>lt;sup>32</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

<sup>&</sup>lt;sup>33</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.



#### Table 33: Price cap calculation – public lighting services

Component	Value	Comment
$\overline{p}_i^t$	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.
$\overline{P}_{t-1}^i$	Various	The cap on the price of service i in year t-1.
$\Delta CPI_t$		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.
		The 'X' factor as given in the AER's distribution determination for TasNetworks.

## **10.2.3** Prices for public lighting services

The proposed 2016-17 prices for each of TasNetworks' public light tariffs are set out in Table 34.

#### Table 34:Tariffs for public lighting by type

Lighting type	Price (c/day)	Annual charge (\$)
18W LED	33.488	122.23
18W LED decorative	46.896	171.17
25W LED	33.488	122.23
25W LED decorative	46.896	171.17
42W compact fluorescent	35.153	128.31
42W compact fluorescent – bottom pole entry	35.153	128.31
70W sodium vapour	34.993	127.72
100W sodium vapour	44.393	162.03
150W sodium vapour	46.694	170.43
250W sodium vapour	47.809	174.50
400W sodium vapour	48.651	177.58
250W sodium vapour – flood light	51.816	189.13
400W sodium vapour – flood light	51.295	187.23
100W metal halide	44.544	162.59
150W metal halide	47.261	172.50
250W metal halide	48.104	175.58
400W metal halide	53.376	194.82
250W metal halide – flood light	53.523	195.36
400W metal halide – flood light	53.376	194.82
T5 fluorescent 2 x 24W (obsolete)	37.089	135.37
1 x 20W fluorescent (obsolete)	36.806	134.34





Lighting type	Price (c/day)	Annual charge (\$)
50W mercury vapour (obsolete)	32.688	119.31
80W mercury vapour (obsolete)	32.689	119.31
80W mercury vapour – decorative (obsolete)	49.313	179.99
125W mercury vapour (obsolete)	44.261	161.55
250W mercury vapour (obsolete)	44.728	163.26
400W mercury vapour (obsolete)	46.842	170.97

The proposed 2016-17 prices for each of TasNetworks' contract light tariffs are outlined in Table 35.

### Table 35: Tariffs for contract lighting by type

Lighting type	Price (c/day)	Annual charge (\$)
18W LED	12.043	43.96
18W LED decorative	12.043	43.96
25W LED	12.043	43.96
25W LED decorative	12.043	43.96
42W compact fluorescent	17.770	64.86
42W compact fluorescent – bottom pole entry	17.770	64.86
70W sodium vapour	17.977	65.62
100W sodium vapour	22.000	80.30
150W sodium vapour	21.996	80.29
250W sodium vapour	22.126	80.76
400W sodium vapour	22.170	80.92
250W sodium vapour – flood light	22.126	80.76
400W sodium vapour – flood light	22.170	80.92
100W metal halide	21.997	80.29
150W metal halide	22.140	80.81
250W metal halide	22.140	80.81
400W metal halide	22.828	83.32
250W metal halide – flood light	22.140	80.81
400W metal halide – flood light	22.828	83.32
50W mercury vapour (obsolete)	17.640	64.39
80W mercury vapour (obsolete)	17.608	64.27
80W mercury vapour – Aeroscreen (obsolete)	17.608	64.27
125W mercury vapour (obsolete)	21.109	77.05
250W mercury vapour (obsolete)	21.109	77.05
400W mercury vapour (obsolete)	21.259	77.60





Lighting type	Price (c/day)	Annual charge (\$)
1 x 20W fluorescent (obsolete)	17.738	64.74
2 x 20W fluorescent (obsolete)	18.022	65.78
1 x 40W fluorescent (obsolete)	17.757	64.81
2 x 40W fluorescent (obsolete)	18.059	65.92
3 x 40W fluorescent (obsolete)	21.858	79.78
4 x 40W fluorescent (obsolete)	22.159	80.88
4 x 20W fluorescent (obsolete)	18.589	67.85
60W incandescent (obsolete)	17.576	64.15
100W incandescent (obsolete)	21.074	76.92

#### 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 8 of section 3.4.

#### 10.3.2 Setting the 2017-18 fee based services tariffs

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





The 2017-18 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 TasNetworks<sup>34</sup>.

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 TasNetworks<sup>35</sup>:

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

Table 36 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its fee based services tariffs.

Component	Value	Comment
$\overline{p}_i^t$	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.
$\overline{P}_{t-1}^i$	Various	The cap on the price of service i in year t-1.
$\Delta CPI_t$	%	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.
$X_i^t$	%	The 'X' factor as given in the AER's distribution determination for TasNetworks.

 Table 36:
 Price cap calculation – fee based services

#### 10.3.3 Prices for fee based services

The proposed 2017-18 prices for each of TasNetworks' fee based services tariffs are outlined in Table 37.

#### Table 37: Tariffs for fee based services

Service	Price (\$)	
Energisation, de-energisation, re-energisation and special reads		
Site visit – no appointment	59.53	
Site visit – non-scheduled visit	131.59	
Site visit – same day premium service	222.84	
Site visit – after hours	350.32	
Site visit – credit action or site issues	138.47	
Site visit – credit action pillar box/pole top	248.47	
Site visit – current transformer (CT) metering	129.03	

<sup>&</sup>lt;sup>34</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

<sup>&</sup>lt;sup>35</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.



Service	Price (\$)
Site visit – pillar box/pole top	248.47
Site visit – pillar box/pole top wasted visit	148.13
Transfer of retailer	0.00
Meter alteration	
Tariff alteration – single phase	139.88
Tariff alteration – three phase	183.33
Adjust time clock	81.24
Install pulse outputs	129.03
Remove meter – single phase	139.88
Remove meter – multi phase	183.33
Meter alteration – after hours visit	429.47
Meter alteration – wasted visit	85.58
Meter test	
Meter test – single phase	215.91
Meter test – multi phase	411.38
Meter test – current transformer (CT)	454.83
Meter test – after hours	825.24
Meter test –wasted visit	85.58
Supply abolishment	
Remove service & meters	260.72
Supply abolishment – after hours	655.77
Supply abolishment – wasted visit	169.51
Truck tee-up	
Tee-up/appointment	146.27
Tee-up/appointment – after hours	655.77
Tee-up/appointment – no truck – after hours	350.32
Tee-up/appointment – wasted visit	95.94
Miscellaneous services	
Open turret	137.77
Data download	276.20
Alteration to unmetered supply	213.28
Meter relocation	165.69
Miscellaneous service	125.19
Miscellaneous service – after hours	559.33
Miscellaneous service – wasted visit	100.01





Service	Price (\$)
Connection establishment charges	
Overhead service, single span – single phase	551.02
Overhead service, single span – multi phase	777.13
Underground service in turret/cabinet – single phase	180.57
Underground service in turret/cabinet – multi phase	226.46
Underground service with pole mounted fuse – single phase	422.33
Underground service with pole mounted fuse – multi phase	530.44
Basic connection – after hours	1,010.36
Connection establishment – wasted visit	154.43
Renewable energy connection	
Modify existing connection for micro embedded generation – single phase	171.17
Modify existing connection for micro embedded generation – multi phase	214.61
Renewable energy connection – after hours	809.11
Renewable energy – wasted visit	116.87
Temporary disconnection charges	
Disconnect/reconnect overhead service for facia repairs – single phase	322.67
Disconnect/connect overhead service for facia repairs – multi phase	413.89
Temporary disconnect/reconnect – after hours	852.57
Temporary disconnect/reconnect – wasted visit	185.85
Basic connection alteration	
Connection alteration – overhead single phase	322.67
Connection alteration – overhead multi-phase	413.89
Connection of new consumer mains to an existing installation – underground single phase to turret or pole	225.21
Connection of new consumer mains to an existing installation – underground multi-phase to turret or pole	275.55
Augment single phase overhead service to multi-phase supply	845.55
Augment multi-phase overhead service to single phase supply	619.44
Augment single phase overhead service to underground supply (turret)	392.32
Augment multi-phase overhead service to underground supply (turret)	483.53
Augment single phase overhead service to underground supply (pole)	490.75
Augment multi-phase overhead service to underground supply (pole)	598.84
Basic connection alteration – after hours	1,082.17
Basic connection – wasted visit	174.45





#### 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 9 of section 3.4.

#### 10.4.2 Setting the 2017-18 quoted services tariffs

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

The 2017-18 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 TasNetworks<sup>36</sup>.

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 TasNetworks<sup>37</sup>:

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 TasNetworks<sup>38</sup>:

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

Table 38 provides details of the labour rate cap calculation that TasNetworks has utilised in the preparation of its quoted services tariffs.

Component	Value	Comment
Labour	Various	The price for each quoted service labour rate as given in the AER's distribution determination for TasNetworks.
Δርρι <sub>τ</sub>		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.
Xt <sup>i</sup>	0	The X factor for service i in year t.

Table 38:	Price cap calculation for quoted services
-----------	---

<sup>&</sup>lt;sup>36</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

<sup>&</sup>lt;sup>37</sup> Final Decision, TasNetworks distribution determination 2017-18 to 2018-19, Attachment 19 – Tariff structure statement, April 2017.

<sup>&</sup>lt;sup>38</sup> 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 2017-18 prices for each of TasNetworks' quoted services tariffs are outlined in Table 39.

Table 39:	Tariffs for	quoted services
-----------	-------------	-----------------

Labour	Price (\$/hour)
Cable jointer	60.56
Customer connections – commercial metering	63.09
Customer connections – service crew	62.13
Designer	70.05
Distribution electrical technician	62.25
Distribution linesman	56.35
Distribution linesman – live line	63.38
Distribution operator	69.65
Electrical inspector	58.32
Field service co-ordinator	72.38
Labourer – overhead	48.42
Meter reader	48.23
Pole tester	50.22
Project manager	86.06





## **11** Customer price impacts – alternative control services

The price changes between 2016-17 and 2017-18 for alternative control services are provided in the following tables.

#### **11.1 Metering services**

Table 40 provides the difference in the charges between 2016-17 and 2017-18 for the provision of metering services.

Tariff		<b>Price</b> <b>2016-17</b> (c/day)	<b>Price</b> <b>2017-18</b> (c/day)	Percentage change (%) <sup>39</sup>	
Domestic LV – single phase	Capital	7.539	3.192	(19.3%)	
Domestic LV – single phase	Non-capital	7.555	2.894	(19.576)	
Domestic LV – multi phase	Capital	15.645	6.624	(19.3%)	
	Non-capital	13.045	6.006	(19.376)	
Domestic LV – CT meters	Capital	19.361	8.198	(19.3%)	
Domestic LV – CT meters	Non-capital	19.301	7.432	(19.576)	
Domestic LV – single phase (remote read) (obsolete)		6.481	n.a.	n.a.	
Domestic LV – multi phase (remote read) (obsolete)		14.654	n.a.	n.a.	
Domestic LV – CT meters (remote read) (obsolete)		21.119	n.a.	n.a.	
	Capital	7.798	3.302	(19.3%)	
Business LV – single phase	Non-capital		2.994		
Business LV – multi phase	Capital	15.600	6.605	(19.3%)	
Business LV – multi phase	Non-capital		5.989		
Business LV – CT meters	Capital	20 172	8.541	(19.3%)	
business LV – CT meters	Non-capital	20.172	7.744	(19.3%)	
Business LV – single phase (remote read) (obsolete)		6.481	n.a.	n.a.	
Business LV – multi phase (remote read) (obsolete)		14.654	n.a.	n.a.	
Business LV – CT meters (remote read) (obsolete)		21.119	n.a.	n.a.	
	Capital	40.707	5.829	(10.22())	
Other meters (PAYG)	Non-capital	13.767	5.285	(19.3%)	

Table 40:	Metering services – percentage price change
	wietering services percentage price enange

~

<sup>&</sup>lt;sup>39</sup> Percentage change for metering services is not applicable due to change in charge structure.



#### **11.2** Public lighting services

Table 41 provides the difference in the charges between 2016-17 and 2017-18 for the provision of public lighting services.

Table 41:	Public lighting – percentage price change
-----------	---

Tariff	Price 2016-17 (c/day)	Price 2017-18 (c/day)	Percentage change (%)
18W LED	n.a.	33.488	n.a.
18W LED decorative	n.a.	46.896	n.a.
25W LED	n.a.	33.488	n.a.
25W LED decorative	n.a.	46.896	n.a.
42W compact fluorescent	34.271	35.153	2.6%
42W compact fluorescent – bottom pole entry	n.a.	35.153	n.a.
70W sodium vapour	34.325	34.993	1.9%
100W sodium vapour	34.581	44.393	28.4%
150W sodium vapour	38.223	46.694	22.2%
250W sodium vapour	38.341	47.809	24.7%
400W sodium vapour	38.532	48.651	26.3%
250W sodium vapour – flood light	n.a.	51.816	n.a.
400W sodium vapour – flood light	n.a.	51.295	n.a.
100W metal halide	n.a.	44.544	n.a.
150W metal halide	38.223	47.261	23.6%
250W metal halide	38.341	48.104	25.5%
400W metal halide	n.a.	53.376	n.a.
250W metal halide – flood light	n.a.	53.523	n.a.
400W metal halide – flood light	n.a.	53.376	n.a.
T5 fluorescent 2 x 24W (obsolete)	n.a.	37.089	n.a.
1 x 20W fluorescent (obsolete)	n.a.	36.806	n.a.
50W mercury vapour	32.230	32.688	1.4%
80W mercury vapour (obsolete)	32.230	32.689	(36.0%)
80W mercury vapour – decorative (obsolete)	51.058	49.313	53.0%
125W mercury vapour (obsolete)	37.111	44.261	19.3%
250W mercury vapour (obsolete)	37.541	44.728	19.1%
400W mercury vapour (obsolete	41.707	46.842	12.3%

Table 42 provides the difference in the charges between 2016-17 and 2017-18 for the provision of contract lighting services.





## Table 42: Contract lighting – percentage price changes

Tariff	<b>Price</b> <b>2016-17</b> (c/day)	Price 2017-18 (c/day)	Percentage change (%)
18W LED	n.a.	12.043	n.a.
18W LED decorative	n.a.	12.043	n.a.
25W LED	n.a.	12.043	n.a.
25W LED decorative	n.a.	12.043	n.a.
42W compact fluorescent	n.a.	17.770	n.a.
42W compact fluorescent – bottom pole entry	n.a.	17.770	n.a.
70W sodium vapour	22.191	17.977	(19.0%)
100W sodium vapour	n.a.	22.000	n.a.
150W sodium vapour	23.667	21.996	(7.1%)
250W sodium vapour	23.634	22.126	(6.4%)
400W sodium vapour	23.704	22.170	(6.5%)
250W sodium vapour – flood light	n.a.	22.126	n.a.
400W sodium vapour – flood light	n.a.	22.170	n.a.
100W metal halide	n.a.	21.997	n.a.
150W metal halide	23.667	22.140	(6.5%)
250W metal halide	23.634	22.140	(6.3%)
400W metal halide	23.634	22.828	(3.4%)
250W metal halide – flood light	n.a.	22.140	n.a.
400W metal halide – flood light	n.a.	22.828	n.a.
50W mercury vapour (obsolete)	22.017	17.640	(19.9%)
80W mercury vapour (obsolete)	22.006	17.608	(20.0%
80W mercury vapour – Aeroscreen (obsolete)	n.a.	17.608	n.a.
125W mercury vapour (obsolete)	22.996	21.109	(8.2%)
250W mercury vapour (obsolete)	23.065	21.109	(8.5%)
400W mercury vapour (obsolete)	23.116	21.259	(8.0%)
1 x 20W fluorescent	22.067	17.738	(19.6%)
2 x 20W fluorescent	22.179	18.022	(18.7%)
1 x 40W fluorescent	22.075	17.757	(19.6%)
2 x 40W fluorescent	23.171	18.059	(22.1%)
3 x 40W fluorescent	23.290	21.858	(6.1%)
4 x 40W fluorescent	24.071	22.159	(7.9%)
4 x 20W fluorescent	n.a.	18.589	n.a.
60W incandescent	22.004	17.576	(20.1%)
100W incandescent	22.982	21.074	(8.3%)





#### **11.3** Fee based services

Table 43 provides the difference in the charges between 2016-17 and 2017-18 for the provision of fee based services.

Tariff	Price 2016-17 (\$)	Price 2017-18 (\$)	Percentage change (%)	
De-energisation, re-energisation and special reads				
Site visit – no appointment	53.34	59.53	11.6%	
Site visit – non-scheduled visit	120.22	131.59	9.5%	
Site visit – same day premium service	310.59	222.84	(28.3%)	
Site visit – after hours	801.52	350.32	(56.3%)	
Site visit – credit action or site issues	78.18	138.47	77.1%	
Site visit – credit action pillar box/pole top	n.a.	248.47	n.a.	
Site visit – current transformer (CT) metering	n.a.	129.03	n.a.	
Site visit – pillar box/pole top	n.a.	248.47	n.a.	
Site visit – pillar box/pole top wasted visit	n.a.	148.13	n.a.	
Transfer of retailer	n.a.	0.00	n.a.	
Meter alteration				
Tariff alteration – single phase	178.76	139.88	(21.7%)	
Tariff alteration – three phase	243.78	183.33	(24.8%)	
Adjust time clock	58.51	81.24	38.8%	
Install pulse outputs	162.52	129.03	(20.6%)	
Remove meter – single phase	270.20	139.88	(48.2%)	
Remove meter – multi phase	270.20	183.33	(32.2%)	
Meter alteration – after hours visit	780.05	429.47	(44.9%)	
Meter alteration – wasted visit	97.51	85.58	(12.2%)	
Meter test				
Meter test – single phase	292.52	215.91	(26.2%)	
Meter test – multi phase	585.04	411.38	(29.7%)	
Meter test – CT	650.05	454.83	(30.0%)	
Meter test – after hours	780.05	825.24	5.8%	
Meter test –wasted visit	97.51	85.58	(12.2%)	
Supply abolishment				
Remove service and meters	n.a.	260.72	n.a.	
Supply abolishment – after hours	n.a.	655.77	n.a.	
Supply abolishment – wasted visit	n.a.	169.51	n.a.	

 Table 43:
 Fee based services – percentage price change





Tariff	Price 2016-17 (\$)	Price 2017-18 (\$)	Percentage change (%)
Truck tee-up		-	_
Tee-up/Appointment	129.74	146.27	12.7%
Tee-up/Appointment – after hours	1,457.76	655.77	(55.0%)
Tee-up/Appointment – no truck – after hours	1,297.00	350.32	(73.0%)
Tee-up/Appointment – wasted visit	162.12	95.94	(40.8%)
Miscellaneous service			
Open turret	146.26	137.77	(5.8%)
Data download	325.01	276.20	(15.0%)
Alteration to unmetered supply	243.78	213.28	(12.5%)
Meter relocation	n.a.	165.69	n.a.
Miscellaneous service	130.01	125.19	(3.7%)
Miscellaneous service – after hours	780.05	559.33	(28.3%)
Miscellaneous service – wasted visit	162.12	100.01	(38.3%)
Connection establishment charges			
Overhead service, single span – single phase	n.a.	551.02	n.a.
Overhead service, single span – multiphase	n.a.	777.13	n.a.
Underground service in turret/cabinet – single phase	n.a.	180.57	n.a.
Underground service in turret/cabinet – multi-phase	n.a.	226.46	n.a.
Underground service with pole mounted fuse – single phase	n.a.	422.33	n.a.
Underground service with pole mounted fuse – multi- phase	n.a.	530.44	n.a.
Basic connection – after hours	n.a.	1,010.36	n.a.
Connection establishment wasted visit	n.a.	154.43	n.a.
Renewable energy connection			
Modify existing connection for micro embedded generation – single phase	n.a.	171.17	n.a.
Modify existing connection for micro embedded generation – multi-phase	n.a.	214.61	n.a.
Renewable energy connection – after hours	n.a.	809.11	n.a.
Renewable energy connection – wasted visit	n.a.	116.87	n.a.
Temporary disconnection charges			
Disconnect/reconnect overhead service for fascia repairs – single phase	n.a.	322.67	n.a.
Disconnect/reconnect overhead service for fascia repairs – multi-phase	n.a.	413.89	n.a.





Tariff	Price 2016-17 (\$)	Price 2017-18 (\$)	Percentage change (%)
Temporary disconnect/reconnect – after hours	n.a.	852.57	n.a.
Temporary disconnect/reconnect – wasted visit	n.a.	185.85	n.a.
Basic connection alteration			
Connection alteration – overhead single phase	n.a.	322.67	n.a.
Connection alteration – overhead multi-phase	n.a.	413.89	n.a.
Connection of new consumer mains to an existing installation – underground single phase to turret or pole	n.a.	225.21	n.a.
Connection of new consumer mains to an existing installation – underground multi-phase to turret or pole	n.a.	275.55	n.a.
Augment single phase overhead service to multi-phase supply	n.a.	845.55	n.a.
Augment multi-phase overhead service to single phase supply	n.a.	619.44	n.a.
Augment single phase overhead service to underground supply (turret)	n.a.	392.32	n.a.
Augment multi-phase overhead service to underground supply (turret)	n.a.	483.53	n.a.
Augment single phase overhead service to underground supply (pole)	n.a.	490.75	n.a.
Augment multi-phase overhead service to underground supply (pole)	n.a.	598.84	n.a.
Basic connection alteration – after hours	n.a.	1,082.17	n.a.
Basic connection wasted visit	n.a.	174.45	n.a.

### 11.4 Quoted services

Table 44 provides the difference in the labour rate charges between 2016-17 and 2017-18 for the provision of quoted services.

Tariff	Price 2016-17 (\$/hour)	Price 2017-18 (\$/hour)	Percentage change (%)
Cable jointer	58.67	60.56	3.2%
Customer connections – commercial metering	65.72	63.09	(4.0%)
Customer connections – service crew	59.22	62.13	4.9%
Designer	74.06	70.05	(5.4%)
Distribution electrical technician	58.88	62.25	5.7%
Distribution linesman	53.92	56.35	4.5%
Distribution linesman – live line	58.78	63.38	7.8%
Distribution operator	63.82	69.65	9.1%





Tariff	Price 2016-17 (\$/hour)	Price 2017-18 (\$/hour)	Percentage change (%)
Electrical inspector	63.11	58.32	(7.6%)
Field service co-ordinator	81.63	72.38	(11.3%)
Labourer – overhead	49.87	48.42	(2.9%)
Meter reader	45.47	48.23	6.1%
Pole tester	49.54	50.22	1.4%
Project manager	74.59	86.06	15.4%





## **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 2017-18, in accordance with the AER's distribution determination for TasNetworks<sup>40</sup>.

#### **12.2** Changes to alternative control services tariffs

The pricing proposal includes a number of changes to alternative control services tariffs as a result of the AER final decision, material changes being:

- Metering the AEMC has made changes to the National Electricity Rules and the National Energy Retail Rules in relation to the provision of metering services. Our metering charges are now split between a capital and non-capital fee, the treatment of this in relation to the rollout of advance meters is covered in our Metering Services Application and Price Guide.
- Public Lighting new lighting technologies are now included in the public lighting tariffs, including 18W LED and 25W LED.
- Ancillary service fee based services there are a number of changes to the tariff offerings for fee based services, the most significant change is the moving our basic connections services to alternative control (previously included as standard control services) which include:
  - Connection establishment charges;
  - o Renewable energy connection;
  - Temporary disconnection charges;
  - o Basic connection alteration.

Other changes to tariffs include:

- Retail contract termination, de-energisation, re-energisation, energisation and special reads new tariff offerings for:
  - Site visit credit action pillar box/pole top;
  - Site visit- current transformer (CT) metering;
  - Site visit pillar box/pole top;
  - Site visit pillar box/pole top wasted visit.
- Tee-up/appointment:

- Tee-up/appointment;
- Removal of Tee-up (15 minute and 30 minute block).
- Ancillary service quoted services TasNetworks has added a range of new design and construction audit services to the services provided under quoted services. Apprentice labour rate has been removed from labour rates under quoted services.

<sup>&</sup>lt;sup>40</sup> Final Distribution Determination, Tasmanian Networks Pty Ltd, 2017-18 to 2018-19, April 2017.



## **13** Compliance review

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

- (1) 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
- (2) all forecasts associated with the proposal are reasonable.

To assist the AER in this determination, we have undertaken a comprehensive review 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.





## 14 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 PP010 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.





## **15** Distribution pricing proposal compliance obligations

#### 15.1 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 45 sets out those obligations and the section of this pricing proposal which addresses each requirement.

Clause	Pricing Proposal Requirement	Reference
6.18.2(a)(1)	A DNSP must submit to the AER, within 15 business days, after publication of the distribution determination, a pricing proposal (the initial pricing proposal) for the first regulatory year of the regulatory control period.	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	Section 5

 Table 45:
 Compliance obligations under the Rules



difference between them.

relevant indicative pricing schedule, or explain any material



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.	Attachment PP009
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	Attachment PP009
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:	Section 3
	<ul> <li>(i) the nature and extent of their usage;</li> <li>(ii) the nature of their connection to the naturally.</li> </ul>	
	<ul><li>(ii) the nature of their connection to the network;</li><li>(iii) whether remotely-read interval metering or other</li></ul>	
	similar metering technology has been installed at the customer's premises as a result of a regulatory obligation or requirement.	





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)	<ul> <li>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:</li> <li>(1) to the extent permitted under paragraph (h); and</li> <li>(2) to the extent necessary to give effect to the pricing principles set out in paragraphs (i) to (j).</li> </ul>	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)	<ul> <li>For each tariff class, the revenue expected to be recovered should lie on or between:</li> <li>(1) an upper bound representing the stand alone cost of serving the retail customers who belong to that class;</li> </ul>	Section 4
	and (2) a lower bound representing the avoidable cost of not serving those retail customers.	
6.18.5(f)	Each tariff must be based on the long run marginal cost of providing the service to which it relates to the retail customers assigned to that tariff with the method of calculating such cost and the manner in which that method is applied to be determined having regard to:	Section 4
	<ul> <li>(1) the costs and benefits associated with calculating, implementing and applying that method as proposed;</li> </ul>	
	(2) the additional costs likely to be associated with meeting demand from retail customers that are assigned to that tariff at times of greatest utilisation of the relevant part of the distribution network; and	
	(3) the location of retail customers that are assigned to that tariff and the extent to which costs vary between different locations in the distribution network.	
6.18.5(g)	The revenue expected to be recovered from each tariff must:	Section 4
	<ul> <li>(1) reflect the Distribution Network Service Provider's total efficient costs of serving the retail customers that are assigned to that tariff;</li> </ul>	
	(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).	





Clause	Pricing Proposal Requirement	Reference
6.18.5(h)	A Distribution Network Service Provider must consider the impact on retail customers of changes in tariffs from the previous regulatory year and may vary tariffs from those that comply with paragraphs (e) to (g) to the extent the Distribution Network Service Provider considers reasonably necessary having regard to:	Section 4 Section 5
	<ul> <li>(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);</li> </ul>	
	<ul><li>(2) the extent to which retail customers can choose the tariff to which they are assigned; and</li></ul>	
	(3) the extent to which retail customers are able to mitigate the impact of changes in tariffs through their usage decisions.	
6.18.5(i)	The structure of each tariff must be reasonably capable of being understood by retail customers that are assigned to that tariff, having regard to:	Section 3
	(1) the type and nature of those retail customers; and	
	(2) the information provided to, and the consultation undertaken with, those retail customers.	
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)	<ul> <li>The permissible percentage is the greater of the following:</li> <li>(1) the CPI-X limitation on any increase in the DNSP's expected weighted average revenue between the two regulatory years plus 2%.</li> <li>(2) CPI plus 2%.</li> </ul>	Not applicable for the 2017-18 regulatory year.





Clause	Pricing Proposal Requirement	Reference
6.18.6(d)	In deciding whether the permissible percentage has been exceeded in a particular regulatory year, the following are to be disregarded:	Not applicable for the 2017-18 regulatory year.
	<ul> <li>(1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13;</li> </ul>	
	<ul> <li>the recovery of revenue to accommodate pass through of designated pricing proposal charges to retail customers;</li> </ul>	
	<ul> <li>the recovery of revenue to accommodate pass through of jurisdictional scheme amounts for approved jurisdictional schemes; and</li> </ul>	
	<ul> <li>(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(I).</li> </ul>	
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)	The over and under recovery amount must be calculated in a way that:	Section 6 Attachment PP007
	<ul> <li>(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;</li> </ul>	
	(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.	
6.18.7(d)	Notwithstanding anything else in this clause 6.18.7, a DNSP may not recover charges under this clause to the extent these are:	Section 6
	<ol> <li>recovered through the Distribution Network Service Provider's annual revenue requirement;</li> </ol>	
	<ul> <li>(2) recovered under clause 6.18.7A; or</li> <li>(3) recovered from another Distribution Network Service Provider.</li> </ul>	
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)	<ul> <li>The over and under recovery amount must be calculated in a way that:</li> <li>(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;</li> <li>(2) ensures a DNSP is able to recover from customers no more and no less than the jurisdictional scheme amounts it incurs; and</li> <li>(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.</li> </ul>	There are no jurisdictional schemes applicable to TasNetworks.





## 16 Attachments

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

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	Indicative Pricing Schedule
PP010	Confidentiality Template





# 17 Listing of tables

Following is a list of the tables within this Annual Distribution Pricing Proposal.

Table 1:	Structure of this document	. 2
Table 2:	Network tariff classes – standard control services	. 6
Table 3:	Recovery of Distribution Use of System	11
Table 4:	Recovery of Transmission Use of System	12
Table 5:	Meter classes for metering services	14
Table 6:	Public lighting types for public lighting services	14
Table 7:	Contract lighting types for public lighting services	16
Table 8:	Ancillary service – fee based services	18
Table 9:	Ancillary service – quoted services	23
Table 10:	Stand-alone and avoidable cost boundaries 2017-18	27
Table 11:	Estimated long run marginal costs	28
Table 12	Revenue cap formula	31
Table 13	Electrical Safety Inspection Service Charge	32
Table 14	Nominal vanilla WACC	32
Table 15	National Energy Market Charge	32
Table 16:	Total allowable revenue	33
Table 17:	Weighted average revenue	35
Table 18:	Changes in assumptions for indicative pricing to pricing proposal	35
Table 19:	Network tariff classes – percentage price change	39
Table 20:	ITC tariffs – percentage price change	41
Table 21:	Locational TUoS charges – percentage price change	43
Table 22:	DUoS charges – standard control services	46
Table 23:	DUoS charges – standard control services (ITC customers)	48
Table 24:	TUoS charges – standard control services	49
Table 25:	TUoS – standard control services (ITC customers)	51
Table 26:	Locational TUoS charges – standard control services	52
Table 27:	Hobart region virtual transmission node	53
Table 28:	Tamar region virtual transmission node	53
Table 29:	Networks tariff reforms	54
Table 30:	Weighted average price movement by Tariff Class	55
Table 31:	Price cap calculation – metering services	58
Table 32:	Tariffs for metering services	58
Table 33:	Price cap calculation – public lighting services	60





Table 34:	Tariffs for public lighting by type	60
Table 35:	Tariffs for contract lighting by type	61
Table 36:	Price cap calculation – fee based services	63
Table 37:	Tariffs for fee based services	63
Table 38:	Price cap calculation for quoted services	66
Table 39:	Tariffs for quoted services	67
Table 40:	Metering services – percentage price change	68
Table 41:	Public lighting – percentage price change	69
Table 42:	Contract lighting – percentage price changes	70
Table 43:	Fee based services – percentage price change	71
Table 44:	Quoted services – percentage price change	73
Table 45:	Compliance obligations under the Rules	78
Table 46:	Attachments	85





# **18** 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
СТ	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	Electricity Supply Industry Act 1995 (Tas)
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
ОН	Overhead
Ombudsman Act	Energy Ombudsman Act 1998 (Tas)
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
Revised 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

