



**TasNetworks**

**2015-16 Pricing Proposal**

**1 July 2015 – 30 June 2016**

**As approved by the AER**



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## Tasmanian Networks Pty Ltd

### 2015-16 Pricing Proposal

#### Amendments and Version History

Version No.	Date of Revision	Authorised by	Details of amendment
1.0	28 April 2015	Revenue & Pricing Regulation Team Leader	Initial version
	30 April 2015	Leader Regulation	Endorsed for submission
	30 April 2015	GM Strategy & Stakeholder Relations	Approved for submission

Amendments to each version of this document will be tracked through TasNetworks' document management system.

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## 1 Preface

TasNetworks commenced operations on 1 July 2014 and was formed by a merger of Aurora's electricity distribution network business and the transmission network business formerly operated by Transend Networks. As a result, TasNetworks is now the 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 National Electricity Rules (the Rules) were amended in December 2014 by the *National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014*. In accordance with the transitional arrangements within the Rules,<sup>1</sup> this amendment does not apply to the pricing proposal that is prepared by TasNetworks for the 2015-16 regulatory year. TasNetworks' pricing proposal is instead to be prepared in accordance with the version of the Rules that immediately applied before the Rule change, or version 65 of the Rules.

The prices TasNetworks charges for the use of its distribution networks (electricity poles and wires) and the provision of associated services to customers are approved by the Australian Energy Regulator (AER). Section 6.18.2 of the Rules<sup>2</sup> requires that for each regulatory year TasNetworks must submit a pricing proposal (an Annual Pricing Proposal) to the AER, at least two months before the commencement of each regulatory year during a regulatory control period.

The current five year regulatory control period began in 1 July 2012 and concludes on 30 June 2017. In taking over Aurora's responsibilities for delivering power to Tasmanian homes and businesses, TasNetworks inherited the AER's decisions regarding the amount of revenue that the distribution network service provider (DNSP) is allowed to recover from the operation of Tasmania's distribution network over that five year period. TasNetworks is now responsible for proposing the prices that it will charge in order to recover the revenue allowances set by the AER.

This document is TasNetworks' Annual Pricing Proposal for the regulatory year commencing 1 July 2015 and has been prepared to comply with the requirements of the Rules and any additional requirements specified by the AER in its distribution determination.

All references to TasNetworks within this Annual Pricing Proposal, unless otherwise stated, are to TasNetworks in its capacity as a licensed DNSP in the Tasmanian region of the National Electricity Market.

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<sup>1</sup> Section 11.74 of the Rules states: Former Chapter 6 applies to the exclusion of current Chapter 6 in relation to the regulatory control period of the Tasmanian DNSP commencing 1 July 2012.

<sup>2</sup> Version 65.

## 2 Introduction

### 2.1 Scope

This Annual Pricing Proposal outlines the proposed network tariffs for standard control services and the proposed tariffs (prices) for alternative control services for the 2015-16 regulatory year. The cost of services provided by TasNetworks where the price is negotiated between TasNetworks and its customers (negotiated services) are not addressed in this pricing proposal.

‘Standard control’ refers to an approach taken by the AER to the regulation of prices that involves the use of a cap on the amount of revenue that TasNetworks is permitted to recover. The AER classifies generic distribution network services, including connections to TasNetworks’ distribution network, as standard control services. The annual revenue allowance which applies to TasNetworks’ standard control services is recovered through general network charges (network tariffs).

‘Alternative control’ denotes another form of pricing control used by the AER, which involves the use of price caps, rather than revenue caps, to regulate TasNetworks’ prices. Services classified as alternative control are typically provided to a small number of identifiable customers on a discretionary or infrequent basis, where the costs – and the associated benefits from the service – can be directly attributed to those customers.

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.

### 2.2 Structure

TasNetworks’ Annual Pricing Proposal is structured as follows.

**Table 1: Structure of this document**

Section	Title	Purpose
2	Introduction	Outlines the scope, structure and purpose of this Annual Pricing Proposal
3	Business characteristics	Provides an overview of the TasNetworks distribution business
4	Pricing framework	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	Assignment of customers and tariffs	Outlines how customers and tariffs are assigned to tariff classes based on the Rules and pricing principles
6	Tariff classes – standard control services	Provides details of each tariff included under standard control services, including a description of each tariff class and the charging parameters which are related to each tariff
7	Tariff classes alternative control services	Details each tariff under alternative control services and the charging parameters related to each service
8	Proposed tariff variations	Outlines the proposed variations in tariffs between the 2014-15 and 2015-16 regulatory years
9	Transmission cost recovery	Outlines how adjustments to charges for transmission costs and any transmission costs resulting from overs and unders are calculated and recovered



Section	Title	Purpose
10	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.
11	Customer price impacts	Discusses the impact on customers of the tariffs proposed for the 2015-16 regulatory year.
12	Tariff development	Outlines tariff development in the medium term, including additional tariffs, structural changes and/or the removal of tariffs proposed over the 2012-17 regulatory control period.
13	Audit certification	Details the audit certification for the calculation of the tariffs applying to standard control services.
14	Confidential information	Details which parts of this Annual Pricing Proposal are confidential and provides reasons in support of a confidentiality claim.
15	Attachments	Lists the attachments to this Annual Pricing Proposal.
16	Listing of figures and tables	Lists the Figures and Tables in this Annual Pricing Proposal.
17	Glossary of terms/abbreviations	Defines the key terms and abbreviations used in this Annual Pricing Proposal.

### 2.3 Purpose

This Annual Pricing Proposal has been prepared for the purposes of complying with the Rules<sup>3</sup> and the AER's distribution determination<sup>4</sup>. It provides customers connected to TasNetworks' distribution network with the methodology and principles which have been followed in proposing TasNetworks' standard control services tariffs and alternative control services prices for the 2015-16 regulatory year.

### 2.4 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 Pricing Proposal is supported by the following documents:

- Network Tariff Application and Price Guide;
- Metering Services Application and Price Guide;
- Public Lighting Application and Price Guide;
- Fee-based Services Application and Price Guide; and
- Quoted Services Application and Price Guide.

These documents are discussed below and should be read in conjunction with this Annual Pricing Proposal.

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<sup>3</sup> Version 65.

<sup>4</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

#### **2.4.1 Network Tariff Application and Price Guide**

The *Network Tariff Application and Price Guide* provides details of the processes used to assign customers to network tariffs, a description of the network tariffs, the terms and conditions applying to those network tariffs and the typical metering required for those network tariffs. It is a guide for customers and retailers seeking to understand the network tariff that is best suited to the circumstances of individual customers and the requirements for the application of the chosen network tariff.

This Guide also includes the applicable rates for each component of the network tariffs that are available to TasNetworks' customers.

#### **2.4.2 Metering Services Application and Price Guide**

TasNetworks' *Metering Services Application and Price Guide* provides details on the assignment of metering charges to network tariffs, a description of TasNetworks' metering tariffs, the terms and conditions surrounding those tariffs and the typical equipment required for those metering tariffs. It is a guide for customers and retailers seeking to understand the metering tariff that will apply to an individual customer's circumstances and the eligibility criteria for the network tariff in question.

This Guide also includes the applicable rates for each of the metering services that TasNetworks will provide.

#### **2.4.3 Public Lighting Tariff Application and Price Guide**

TasNetworks' *Public Lighting Tariff Application and Price Guide* provides a description of the public lighting services provided by TasNetworks, the terms and conditions surrounding those services and the charging components for public and contract lighting services. It is a guide for customers and retailers seeking to understand the public lighting tariff that is applicable to a given light type and the requirements for the application of that chosen tariff.

This Guide also includes the rates applying to each of the public and contract lighting services that TasNetworks will provide.

#### **2.4.4 Fee-based Services Application and Price Guide**

The *Fee-based Services Application and Price Guide* describes the fee-based services that TasNetworks provides, and the terms and conditions surrounding those fee-based services. It is a guide for customers and retailers seeking to understand the fees that will be charged to individual customers and/or retailers for the provision of other services by TasNetworks.

This Guide also includes the applicable rates for each of the fee-based services that provided by TasNetworks.

#### **2.4.5 Quoted Services Application and Price Guide**

TasNetworks' *Quoted Services Application and Price Guide* details the quoted services that TasNetworks provides, as well as the terms and conditions applying to those services. It provides a guide for customers seeking to understand the fees that will be charged to individual customers for the provision of other services by TasNetworks.

This Guide also includes the applicable rates for each of the labour components of the quoted services that TasNetworks will provide.

### **2.5 Further information**

The documents discussed above are available on the TasNetworks web site at:

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

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:

Team Leader Commercial Solutions  
PO Box 60,  
Moonah TAS 7009  
E-mail: [networktariff@tasnetworks.com.au](mailto:networktariff@tasnetworks.com.au)

## **2.6 Overview of compliance obligations**

The matters that must be satisfied by the publication of this Annual Pricing Proposal are set out in section 6.18 of the Rules<sup>5</sup>. TasNetworks' compliance with these requirements is set out in the Appendix of this document.

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<sup>5</sup> Version 65.

### 3 Business characteristics

TasNetworks is an electricity network business owned by the State of Tasmania, with complementary activities in telecommunications and energy related technologies. It was formed in July 2014 after the merger of the former Transend with the distribution network business of Aurora.

TasNetworks' distribution network provides a safe and reliable electricity supply to approximately 235,000 residential and 45,600 business customers across the State. TasNetworks' core distribution assets comprise approximately 15,100 km of overhead high voltage lines, 10,500 km of overhead low voltage lines and 2,400 km of high and low voltage underground cables, 33,000 ground and pole mounted substations and 227,000 poles across an area of 68,000 square kilometres. TasNetworks also operates and maintains approximately 47,000 public lights.

TasNetworks is conscious that rising network costs have contributed to past increases in electricity prices and is committed to delivering sustainably lower power prices in the future. We must do this without detracting from TasNetworks' capacity to deliver a safe and reliable electricity supply.



## 4 Pricing framework

### 4.1 Pricing principles and objectives

TasNetworks' objective in setting network tariffs for standard control services is to ensure regulated revenue is recovered from customers through tariffs that are consistent with the pricing principles outlined in the Rules and the AER's distribution determination.

TasNetworks' objective for alternative control services is to ensure that the price charged is cost reflective and is consistent with the price caps outlined in the AER's distribution determination.

Clause 6.18.5 of the Rules<sup>6</sup> sets out the principles that TasNetworks should adopt in the preparation of its tariffs.

Pricing principles:

- (a) For each tariff class, the revenue expected to be recovered should lie on or between:
  - (1) an upper bound representing the stand alone cost of serving the retail customers who belong to that class; and
  - (2) a lower bound representing the avoidable cost of not serving those retail customers.
- (b) A tariff, and if it consists of 2 or more charging parameters, each charging parameter for a tariff class:
  - (1) must take into account the long run marginal cost for the service or, in the case of a charging parameter, for the element of the service to which the charging parameter relates; and
  - (2) must be determined having regard to:
    - (i) transaction costs associated with the tariff or each charging parameter; and
    - (ii) whether retail customers of the relevant tariff class are able or likely to respond to price signals.
- (c) If, however, as a result of the operation of paragraph (b), the Distribution Network Service Provider may not recover the expected revenue, the provider must adjust its tariffs so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

TasNetworks has maintained the pricing principles established by Aurora for the 2012-17 regulatory control period. TasNetworks considers that these principles ensure compliance with the Rules requirements and provide clarity in the formulation of robust, equitable network tariffs.

TasNetworks' pricing principles are:

- (a) Tariffs will be consistent with any specific Government policy for electricity pricing.
- (b) Tariffs must be consistent with any relevant AER determination or guideline.
- (c) Tariffs should be based on a well-defined and clearly explained methodology.
- (d) Tariffs should signal the economic costs of service provision to customers by:
  - (1) being subsidy free (i.e. greater than incremental costs and less than stand alone costs);

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<sup>6</sup> Version 65.

- (2) having regard to the level of available capacity;
  - (3) signalling the impact of additional usage on future investment costs; and
  - (4) (if tariffs based on above factors under-recover the allowed revenue) making up any shortfall in revenue in a manner that minimises the effect on customers' consumption and investment decisions.
- (e) To the extent practicable, TasNetworks will negotiate with individual customers to ensure that tariffs:
- (1) discourage uneconomic bypass; and
  - (2) reflect the economic value of specific services, including services associated with embedded generation, demand management, interruptible load, and higher or lower quality/reliability services than the quality/reliability associated with standard tariffs.
- (f) Tariffs should consider equity. In particular, where proposed tariff strategies would impose significant adjustment costs on users, a transitional approach should be implemented to assist users manage their adjustment costs.
- (g) When allocating TUOS charges to users, TasNetworks should, to the extent possible, preserve the pricing signals present in the structure of TUOS charges.
- (h) Tariffs should be as simple as possible.
- (i) Information on customer class price levels and structures, service standards, underlying costs, price derivation methods and rationale and medium term price and service strategies should be publicly disclosed in order to allow:
- (1) current and potential users to understand the basis for prices and to take account of prices and service standards in their consumption, investment and location decisions;
  - (2) interested parties to better assess the range of opportunities for meeting user requirements, including through services associated with embedded generation, demand management and other options that may reduce users' costs and lead to more efficient outcomes.

## 4.2 Setting the 2015-16 network tariffs

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

### 4.2.1 Maximum allowable revenue and revenue cap

The 2015-16 network tariffs and charging parameters set out in this Annual Pricing Proposal are based on the maximum allowable revenue (MAR) as determined by the AER in its distribution determination<sup>7</sup>, plus any AER approved adjustments from prior periods (the Revenue Cap).

TasNetworks' MAR is calculated in accordance with the following formula prescribed by the AER in its distribution determination:

$$MAR_t = AR_t \pm \text{passthrough}_t \pm \text{ESISC}_t \pm \text{NEMC}_t \pm \text{transitional}_t$$

Table 2 provides details of the Revenue Cap calculation that TasNetworks has utilised in the preparation of its network tariffs.

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<sup>7</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

**Table 2: Revenue cap**

Component	Amount (\$m)	Comment
AR	280.631	As given in the AER's distribution determination
± passthrough	0.000	AER approved pass-throughs
± ESISC	0.098	Adjustments for differences in the electrical safety levy
± NEMC	0.142	Adjustments for differences in the national energy market levy
<b>MAR</b>	<b>280.870</b>	<b>Expected revenue including all adjustments</b>
Adjustments		
± Unders/Overs	17.891	Adjustment for under/over recovery of revenue in prior periods
<b>Revenue Cap</b>	<b>298.762</b>	<b>Total revenue for revenue cap</b>

#### 4.2.2 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 using its distribution cost of supply (DCoS) model. This modelling process is explained in the paper 'DCoS Methodology' provided as an attachment to this Annual Pricing Proposal.

The final stage of the network tariff development process is to develop a set of tariffs that will recover the network costs that have been allocated to each customer class within the DCoS model. This modelling process is explained in the paper 'DCoS to Tariff Methodology' attached to this Annual Pricing Proposal.

#### 4.2.3 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.

##### 4.2.3.1 Energy consumption

In the past, multiple regression models were used to produce energy consumption forecasts for each customer class. The models were driven by a number of variables, including economic growth (Gross State Product), population growth, weather variation, customer prices and price elasticity of demand measures.

While TasNetworks continues to use many of the same drivers in its consumption forecasting, the outputs from its models for 2015-16 have been overlaid with recent consumption trends within each customer class. As a result, the energy consumption forecasts which underpin this Annual Pricing Proposal anticipate a further decline in consumption however at a lesser rate than has been experienced in recent years.

The 2015-16 energy consumption forecast is for a total consumption of 4104.9 GWh. This forecast is 1.50 per cent lower than TasNetworks' forecast for its 2014-15 pricing proposal.

#### **4.2.3.2 Demand**

The demand forecasts prepared by TasNetworks as a component of its annual planning report will not reconcile with those used by TasNetworks in the development of its network tariffs. This is because the annual planning report 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. 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.

#### **4.2.3.3 Customers**

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



## 5 Assignment of customers and tariffs

The AER's distribution determination<sup>8</sup> sets out the principles TasNetworks is to adhere to in assigning customers to tariff classes and applies to all direct control services (i.e. both standard control and alternative control services).

### 5.1 Assignment of existing customers to tariff classes

TasNetworks' customers will be taken to be assigned to the tariff class which TasNetworks was charging that customer immediately prior to 1 July 2015 if they:

- were a TasNetworks customer prior to 1 July 2015; and
- continue to be a customer of TasNetworks as at 1 July 2015.

### 5.2 Assignment of new customers to a tariff class

If TasNetworks becomes aware that a person will become a customer of TasNetworks, then TasNetworks will determine the tariff class to which the new customer will be assigned.

In determining the tariff class to which a customer or potential customer will be assigned, TasNetworks will take into account one or more of the following factors:

- the nature and extent of the customer's usage;
- the nature of the customer's connection to the network<sup>9</sup>; and
- whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a regulatory obligation or requirement.

In addition to the above requirements, when assigning a customer to a tariff class TasNetworks will ensure:

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

### 5.3 Reassignment of existing customers to another tariff class

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

In some cases, a tariff class will cease. TasNetworks' will notify the customer of this and transition to new tariff classes.

### 5.4 Objections to proposed assignments and reassignments

TasNetworks will notify customers in writing of the tariff class to which they have been assigned or reassigned, prior to the assignment or reassignment occurring. Any notification will inform the customer that they may request further information from TasNetworks and that they may object to the proposed assignment or reassignment. To that end, the notice will:

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<sup>8</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

<sup>9</sup> The AER interprets 'nature' to include the installation of any technology capable of supporting time based tariffs.

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

If TasNetworks receives a request for further information about a tariff assignment or reassignment from a customer, then it will provide such information unless the requested information is considered confidential by TasNetworks.

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

If a customer's objection to a tariff class assignment or reassignment is upheld by the Energy Ombudsman Tasmania or the AER, then any adjustment which needs to be made will be done as part of the next available billing cycle.

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

In accordance with the AER's distribution determination<sup>10</sup>, TasNetworks' Annual Pricing Proposal must contain provision for a system of assessment and review of the basis on which a customer is charged, if the charging parameters for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer. TasNetworks considers that the basis of charge may vary according to usage or load profile where:

- 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 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.

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

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<sup>10</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

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

## **5.6 Assignment process**

The assignment processes adopted by TasNetworks are discussed in more detail in the Network Tariff Application and Price Guide; Metering Services Application and Price Guide; Public Lighting Application and Price Guide; and Fee-based Services Application and Price Guide.

These guides are available on TasNetworks' website at:

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



## 6 Tariff classes – standard control services

### 6.1 Overview

TasNetworks has selected network 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.

The individual, demand and general tariff conditions outlined in this section have, in general, remained unchanged from those of the previous regulatory year. The tariff classes for standard control services are shown in Table 3.

**Table 3: Tariff classes – standard control services**

Tariff class	Tariff	Description
ITC	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 transmission use of system (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.
HV	Business HV kVA Specified Demand (TASSDM)	This network tariff is for customers where: <ul style="list-style-type: none"> <li>connection is made to this site at high voltage; and</li> <li>the expected ATMD of the site is less than 2 MVA.</li> </ul> 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 twelve months. A site connected to the TasNetworks distribution network with this network tariff is not eligible for any other network tariff.
	Business HV kVA Specified Demand >2MVA (TAS15)	This network tariff is for customers where: <ul style="list-style-type: none"> <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> </ul> 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 NUoS charges for the following period of no less than twelve months. A site connected to the TasNetworks distribution network with this network tariff is not eligible for any other network tariff.
Irrigation	Irrigation LV TOU (TAS75)	This low voltage time of use network tariff is for primary producers' business installations that are used solely for the irrigation of crops, which must be classified as ANZSIC class 01.

Tariff class	Tariff	Description
Large LV	Business LV kVA Demand (TAS82)	This network tariff is for installations that are not private residential dwellings taking low voltage 3-phase supply.
Small LV	Business LV General (TAS22)	This is the basic, low voltage network tariff for installations that are not private residential dwellings.
	Business LV Nursing Homes (TAS34)	This low voltage network tariff is applicable only to those businesses registered as aged care facilities. <i>This network tariff is obsolete, with no new connections allowed.</i>
	General Network – Business, Curtilage (TASCURT)	This network tariff is for rural customers having a single low voltage connection point but requiring more than one meter due to site layout. The single connection point must supply an installation qualifying for, and being supplied on the General Network - Residential network tariff. <i>This network tariff is obsolete, with no new connections allowed.</i>
	Business LV ToU (TAS94)	This is the basic, time of use low voltage network tariff for installations that are not private residential dwellings.
Residential	Residential LV General (TAS31)	This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings.
	Residential LV PAYG (TAS101)	This network tariff supports the Aurora <i>Pay As You Go</i> 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 <i>Pay As You Go</i> product. This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings. <i>This network tariff is obsolete, with no new connections allowed.</i>
	Residential LV PAYG TOU (TAS92)	This time of use network tariff supports the Aurora <i>Pay As You Go</i> 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 <i>Pay As You Go</i> product. This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings.
	Residential LV ToU (TAS93)	This time of use network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings.

Tariff class	Tariff	Description
Uncontrolled Energy	Uncontrolled LV Heating (TAS41)	<p>This network tariff is for low voltage installations.</p> <p>In installations that are private residential dwellings, this network tariff:</p> <ul style="list-style-type: none"> <li>is for water heating and/or residential space heating and/or domestic indoor pool heating only.</li> </ul> <p>In installations that are not private residential dwellings, this network tariff:</p> <ul style="list-style-type: none"> <li>is for water heating only.</li> </ul>
Controlled Energy	Controlled LV Energy – Off Peak with afternoon boost (TAS61)	<p>This off-peak network tariff is for low voltage installations and includes an ‘afternoon boost’ component.</p> <p>In installations that are private residential dwellings, this network tariff:</p> <ul style="list-style-type: none"> <li>is for water heating and/or residential space heating and/or other “wired in” appliances as approved by TasNetworks; and</li> <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> <p>In installations that are not private residential dwellings, this network tariff:</p> <ul style="list-style-type: none"> <li>is for water heating and/or space heating and/or other “wired in” appliances as approved by TasNetworks.</li> </ul>
	Controlled LV Energy – Night period only (TAS63)	<p>This network tariff is for low voltage installations and is only available during off-peak periods.</p> <p>In installations that are private residential dwellings, this network tariff:</p> <ul style="list-style-type: none"> <li>is for water heating and/or residential space heating and/or other circuits as approved by TasNetworks; and</li> <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> <p>In installations that are not private residential dwellings, this network tariff:</p> <ul style="list-style-type: none"> <li>is for water heating and/or space heating and/or other circuits as approved by TasNetworks.</li> </ul>

Tariff class	Tariff	Description
Unmetered	UMS LV General (TASUMS)	<p>This network tariff is for small, low voltage, low demand installations with a relatively constant load profile. For example:</p> <ul style="list-style-type: none"> <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> </ul> <p>All installations on this network tariff must have all components permanently connected. For the avoidance of doubt, an installation containing a power point does not qualify for this network tariff.</p>
Streetlights	UMS LV Public Lighting (TASUMSSL)	<p>This network tariff is for customers that have a lighting service provided by TasNetworks.</p> <p>This network tariff does not include charges for the installation and/or replacement of lamps. Costs for the installation or replacement of lamps are an additional charge.</p>
Embedded Generator	Residential LV Import Transitional (TASX1I)	<p>This network tariff is for the recording of 'export energy' for those residential installations that import energy into the distribution system and are eligible for the residential transitional feed-in tariff rate.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p>
	Business LV Import Transitional (TASX2I)	<p>This network tariff is for the recording of 'export energy' for those commercial installations that import energy into the distribution system and are eligible for the business transitional feed-in tariff rate.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p>
	Residential LV Import Fair and Reasonable (TASX4I)	<p>This network tariff is for the recording of 'export energy' for those residential installations that import energy into the distribution system and are eligible for the standard feed-in tariff rate.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, TasNetworks does not apply a charge for this network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p>

Tariff class	Tariff	Description
	Business LV Import Fair and Reasonable (TASX5I)	This network tariff is for the recording of 'export energy' for those commercial installations that import energy into the distribution system and are eligible for the standard feed-in tariff rate. 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 (TASX6I)	This network tariff is for the recording of 'export energy' for those installations that import 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.

## 6.2 Charging parameters for standard control services

TasNetworks structures the charging parameters within its network tariffs to signal the impact that customers have on the distribution network and to manage demand and volume variance risk. In this context:

- TasNetworks' fixed charge parameters for each network tariff have been designed to recover the incremental costs that arise from the connection and management of the customer. This sends a signal to those customers about the cost of their connection works, and sets a constant and foreseeable price that assists them in making a decision to connect with full visibility of the costs. The fixed charges also provide TasNetworks with a fixed revenue source by which it can recover its residual costs and, therefore, ensure that upstream investment decisions can be made with clarity.
- TasNetworks' volume charges are designed to recover the costs of the shared network on a basis which reflects the characteristics of the network user. However, over time there will be less reliance on consumption based volume-charging and a move towards demand based charges. Further detail in respect to this transition path will be outlined in subsequent Pricing Proposals and as part of TasNetworks customer consultation program.
- TasNetworks' demand and specified demand charges are designed to recover the costs of the shared network on a basis which reflects the characteristics of the network user.

### 6.2.1 Recovery of DUoS

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 DUoS tariffs are detailed in Table 4.



**Table 5: Tariff charging parameters for DUoS charges**

Tariff class	Tariff charging (Parameter)				
	Network tariff code	Daily charge (c/day)	Volume charge <sup>1</sup> (c/kWh)	Demand charge (c/kVA/day)	Specified demand charge (c/kVA/day)
ITC	TASCUS1	✓	✓		✓
	TASCUS2	✓	✓		✓
	TASCUS3	✓	✓		✓
	TASCUS4	✓	✓		✓
HV	TASSDM	✓	✓		✓
	TAS15	✓	✓		✓
Irrigation	TAS75	✓	✓		
Large LV	TAS82	✓	✓	✓	
Small LV	TAS22	✓	✓		
	TAS34	✓	✓		
	TASCURT	✓	✓		
	TAS94	✓	✓		
Residential	TAS31	✓	✓		
	TAS92	✓	✓		
	TAS101	✓	✓		
	TAS93	✓	✓		
Uncontrolled Energy	TAS41	✓	✓		
Controlled Energy	TAS61	✓	✓		
	TAS63	✓	✓		
Unmetered	TASUMS	✓	✓		
Street Lighting	TASUMSSL		✓ <sup>2</sup>		
Embedded Generation <sup>3</sup>	TASX1I				
	TASX2I				
	TASX41				
	TASX5I				
	TASX6I				

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

2 Public lighting – c/lamp watt/day.

3 There are no charges for this tariff class.

### 6.2.2 Recovery of TUoS

Electricity is received into TasNetworks' distribution network primarily from the TasNetworks' transmission network formerly operated by Transend. Despite TasNetworks now operating both networks, the transmission network is still 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. The 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, in order to recover transmission costs, are based on forecasts of the TUoS charges that will be incurred at each connection point with the distribution network, which are aggregated and then adjusted for past under or over recoveries of TUoS by the distributor, as per the AER's distribution determination<sup>11</sup>. The TUoS charges applied to the distribution network and recovered from customers from the distribution network comprise both fixed and variable charges.

The TUoS components of network tariffs have been rebalanced in a move towards a more cost reflective basis for transmission cost recovery. This initial tariff rebalancing has been focussed on aligning network tariffs where the underlying transmission network cost drivers are consistent, namely, the uncontrolled energy tariff and residential and small business general light and power tariffs. The 2015-16 rebalancing represents an initial step in the transition to more cost reflective tariffs and further tariff adjustments will be undertaken in subsequent years.

The distribution network in Tasmania has in excess of 40 transmission connection points, each with its own pricing, and it is not presently administratively efficient to pass on locational TUoS pricing signals to all customers that are connected to the distribution network. TasNetworks is also required to provide all low voltage customers in Tasmania with a 'postage stamp' price, irrespective of their ultimate transmission connection point. Consequently, TasNetworks only preserves the locational pricing signals within transmission network charges for larger, high voltage customers that take their supply from the distribution network. These largest customers are generally covered by the ITC and TAS15 network tariffs.

The network charging parameters adopted by TasNetworks for the recovery of standard control services TUoS tariffs are detailed in Table 6.

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<sup>11</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

**Table 7: Tariff charging parameters for TUoS charges**

Tariff class	Tariff charging (Parameter)				
	Network tariff code	Daily charge (c/day)	Volume charge <sup>1</sup> (c/kWh)	Demand charge (c/kVA/day)	Specified demand charge (c/kVA/day)
ITC	TASCUS1				√ <sup>2</sup>
	TASCUS2				√ <sup>2</sup>
	TASCUS3				√ <sup>2</sup>
	TASCUS4				√ <sup>2</sup>
HV	TASSDM		✓		✓
	TAS15				√ <sup>2</sup>
Irrigation	TAS75		✓		
Large LV	TAS82		✓	✓	
Small LV	TAS22		✓		
	TAS34		✓		
	TASCURT		✓		
	TAS94		✓		
Residential	TAS31		✓		
	TAS92		✓		
	TAS101		✓		
	TAS93		✓		
Uncontrolled Energy	TAS41		✓		
Controlled Energy	TAS61		✓		
	TAS63		✓		
Unmetered	TASUMS		✓		
Street Lighting	TASUMSSL		√ <sup>3</sup>		
Embedded Generation <sup>4</sup>	TASX1I				
	TASX2I				
	TASX4I				
	TASX5I				
	TASX6I				

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

2 Demand charge is locational and based upon the transmission connection point.

3 Public lighting – c/lamp watt/day.

4 There are no charges for this tariff class.

### 6.3 Tariffs

The proposed DUoS charges for each of TasNetworks' 2015-16 network tariffs are outlined in Table 6.

The proposed DUoS charges for each of TasNetworks' 2015-16 ITC<sup>12</sup> and TAS15 network tariffs are outlined in Table 7.

The proposed TUoS charges for each of TasNetworks' 2015-16 network tariffs are outlined in Table 8.

The proposed TUoS charges for each of TasNetworks' 2015-16 ITC<sup>13</sup> and TAS15 network tariffs are outlined in Table 9.

The proposed locational TUoS charges that are applicable to TasNetworks' 2015-16 ITC and TAS15 tariffs are outlined in Table 10.

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<sup>12</sup> ITC tariff rates are confidential.

<sup>13</sup> ITC tariff rates are confidential.

**Table 8: Proposed tariffs for DUoS – standard control services**

DUoS rates										
Network tariff code	Tariff description	Daily charge c/day	ToU energy rate c/kWh			Step energy rates c/kWh		Demand rates c/kVA(kW) /day	Capacity charges c/kVA/day	
			Peak	Shoulder	Off-peak	Step 1	Remaining		Specified	Excess
TAS31	Residential LV General	45.584					12.065			
TAS22	Business LV General	45.584					12.065			
TAS34	Business LV Nursing Homes	45.584				12.065	5.529			
TASCURT	General Network – Business, Curtilage	31.909					12.065			
TAS41	Uncontrolled LV Heating	4.936					2.435			
TAS61	Controlled LV Energy – Off Peak with afternoon boost	9.253					0.983			
TAS63	Controlled LV Energy – with Night period only	9.253					0.880			
TASUMS	UMS LV General	45.584					13.863			
TAS75	Irrigation LV TOU	219.051	11.676	7.006	0.895					
TAS82	Business LV kVA Demand	222.458					2.310	32.960		
TASSDM	Business HV kVA Specified Demand	155.657	0.246	0.198	0.066				23.568	235.680
TAS101	Residential LV PAYG	45.584					6.000			
TAS92	Residential LV PAYG TOU	45.584	11.190	6.811	0.894					
TAS94	Business LV ToU	46.518	11.190	7.006	0.894					
TAS93	Residential LV ToU	45.584	11.190	6.811	0.894					
TASUMSSL	UMS LV Public Lighting							0.112		
TASX1I	Residential LV Import Transitional <sup>1</sup>									
TASX2I	Business LV Import Transitional <sup>1</sup>									
TASX4I	Residential LV import Fair and Reasonable <sup>1</sup>									
TASX5I	Business LV Import Fair and Reasonable <sup>1</sup>									
TASX6I	Non-Qualifying Import <sup>1</sup>									

1 There are no charges for this network tariff.

**Table 9: Proposed tariffs for DUoS – standard control services – TAS15 and TASCUS<sup>14</sup>**

DUoS rates										
Network tariff code	Tariff description	Daily charge c/day	Energy rate c/kWh				Connection charge c/kVA/day		Capacity charges c/kVA/day	
			Peak	Shoulder	Off-peak	All energy	Specified	Excess	Specified	Excess
TAS15	Business HV kVA Specified Demand (> 2MVA)	2062.900	1.936	0.524	0.066		0.447	2.235	12.300	61.500
TASCUS1	Individual tariff calculation									
TASCUS1	Individual tariff calculation									
TASCUS1	Individual tariff calculation									
TASCUS1	Individual tariff calculation									
TASCUS1	Individual tariff calculation									
TASCUS1	Individual tariff calculation									

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14 ITC tariff rates are confidential.

**Table 10: Proposed tariffs for TUoS – standard control services**

TUoS rates										
Network tariff code	Tariff description	Daily charge c/day	ToU energy rate c/kWh			Step energy rates c/kWh		Demand rates c/kVA(kW) /day	Capacity charges c/kVA/day	
			Peak	Shoulder	Off-peak	Step 1	Remaining		Specified	Excess
TAS31	Residential LV General						3.490			
TAS22	Business LV General						3.490			
TAS34	Business LV Nursing Homes					3.490	3.289			
TASCURT	General Network – Business, Curtilage						3.490			
TAS41	Uncontrolled LV Heating						2.771			
TAS61	Controlled LV Energy – Off Peak with afternoon boost						0.730			
TAS63	Controlled LV Energy – Night period only						0.650			
TASUMS	UMS LV General						4.537			
TAS75	Irrigation LV TOU		3.938	2.579	0.594					
TAS82	Business LV kVA Demand						0.809	18.806		
TASSDM	Business HV kVA Specified Demand		1.204	0.894	0.553				1.421	14.210
TAS101	Residential LV PAYG						2.233			
TAS92	Residential LV PAYG TOU		3.839	2.595	0.658					
TAS94	Business LV TOU		3.839	2.595	0.658					
TAS93	Residential LV TOU		3.839	2.595	0.658					
TASUMSSL	UMS LV Public Lighting							0.036		
TASX1I	Residential LV Import Transitional <sup>1</sup>									
TASX2I	Business LV Import Transitional <sup>1</sup>									
TASX4I	Residential LV Import Fair and Reasonable <sup>1</sup>									
TASX5I	Business LV Import Fair and Reasonable <sup>1</sup>									
TASX6I	Non-Qualifying Import <sup>1</sup>									

1 There are no charges for this tariff.

**Table 11: Proposed tariffs for TUoS – standard control services – TAS15 and TASCUS<sup>15</sup>**

TUoS rates										
Network tariff code	• Tariff description	Daily charge c/day	ToU energy rate c/kWh			Step energy rates c/kWh		Demand rates c/kVA(kW) /day	Capacity charges c/kVA/day	
			• Peak	Shoulder	Off-peak	• Step 1	Remaining		Specified	Excess
TAS15	Business HV kVA Specified Demand (> 2MVA)								Locational	Locational
TASCUS1	Individual tariff calculation								Locational	Locational
TASCUS2	Individual tariff calculation								Locational	Locational
TASCUS3	Individual tariff calculation								Locational	Locational
TASCUS4	Individual tariff calculation								Locational	Locational

<sup>15</sup> ITC tariff rates are confidential.



**Table 12: Proposed tariffs for locational TUoS – standard control services**

Transmission node identifier	Transmission node description	Daily charge c/kVA/day
TAL2	Arthurs Lake	16.929
TAV2	Avoca	21.442
TBU3	Burnie	17.888
TBW2	Bridgewater	19.099
TDB2	Derwent Bridge	282.865
TDE2	Derby	36.264
TDP2	Devonport	19.809
TEB2	Emu Bay	24.343
TEL2	Electrona	23.231
TKE2	Kermandie	37.101
TKI2	Kingston 11KV	17.435
TKI3	Kingston 33KV	22.151
TKR2	Knights Road	24.528
TMB2	Meadowbank	20.756
TNN2	New Norfolk	21.355
TNT2	Newton	42.482
TPL2	Port Latta	20.487
TPM3	Palmerston	19.776
TQT2	Queenstown	30.070
TRA2	Railton	19.621
TRB2	Rosebery	19.362
TSD2	Scottsdale	39.197
TSM2	St Marys	27.957
TSO2	Sorell	24.135
TSR2	Savage River	22.067
TST2	Smithton	26.125
TTB2	Triabunna	28.620
TTU2	Tungatinah	65.515
TUL2	Ulverstone	17.526
TWA2	Waddamana	34.929
TWV2	Wesley Vale	40.056
TVN1	Hobart Virtual	19.052
TVN2	Tamar Virtual	16.583

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) for this VTN is TVN1.

**Table 13: Hobart region virtual transmission nodes**

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

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 for this VTN is TVN2.

**Table 14: Tamar region virtual transmission nodes**

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

## 7 Tariff classes – alternative control services

### 7.1 Overview

In its distribution determination<sup>16</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;
- fee-based services; and
- quoted services.

Tariff classes and definitions for TasNetworks' alternative control services are described in Table 13.

**Table 15: Tariff classes for alternative control services**

Tariff Class	Definition
Metering	<p>Metering services are those services provided with respect to the provision, installation and maintenance of standard meters and associated services provided to retail customers.</p> <p>This includes the metering services provided using Type 5, Type 6 and Type 7 metering installations in TasNetworks' role as metering provider (MP) and meter data provider (MDP).</p>
Public lighting	<p>Public lighting services are those services provided by TasNetworks for:</p> <ul style="list-style-type: none"> <li>• the provision, maintenance and replacement of public lighting assets owned by TasNetworks;</li> <li>• the maintenance of public lighting assets owned by customers (contract lighting); and</li> <li>• the provision, maintenance and replacement of TasNetworks owned public lighting poles.</li> </ul>
Fee-based services	<p>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 at the request of a third party and are typically initiated by way of a service request received from a retailer.</p>
Quoted services	<p>Quoted (non-standard) services are those services provided by TasNetworks where the nature and scope of the service is specific to individual customer's needs, and varies from customer to customer.</p> <p>As a consequence, the cost of providing the services cannot be estimated without first knowing the customer's specific requirements. It is not possible, therefore, to set a generic total fixed fee in advance for these services.</p> <p>Requests for quoted services may be received from a customer or retailer on behalf of a customer.</p>

<sup>16</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

## 7.2 Metering services

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

### 7.2.1 Overview

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 14.

**Table 16: Meter classes for metering services**

Meter Class	Definition
Domestic LV – single phase	Type 6 metering services provided to all residential customers that are single phase.
Domestic LV – multi phase	Type 6 metering services provided to all residential customers that are multiple phase.
Domestic LV – CT meters	Type 6 metering services provided to all residential customers that require the installation of current or voltage transformers.
Domestic LV – single phase (remote read)	Type 6 metering services provided to all residential customers that are single phase and are remote read (do not require a site visit to collect data).
Domestic LV – multi phase (remote read)	Type 6 metering services provided to all residential customers that are multiple phase and are remote read (do not require a site visit to collect data).
Domestic LV – CT meters (remote read)	Type 6 metering services provided to all residential customers that require the installation of current or voltage transformers and are remote read (do not require a site visit to collect data).
Business LV – single phase	Type 6 metering services provided to all commercial customers that are single phase.
Business LV – multi phase	Type 6 metering services provided to all commercial customers that are multiple phase.
Business LV – CT meters	Type 6 metering services provided to all commercial customers that require the installation of current or voltage transformers.
Business LV – single phase (remote read)	Type 6 metering services provided to all commercial customers that are single phase and are remote read (do not require a site visit to collect data).
Business LV – multi phase (remote read)	Type 6 metering services provided to all commercial customers that are multiple phase and are remote read (do not require a site visit to collect data).
Business LV – CT meters (remote read)	Type 6 metering services provided to all commercial customers that require the installation of current or voltage transformers and are remote read (do not require a site visit to collect data).
Other meters (PAYG)	Type 5 or Type 6 metering services provided to customers that are not one of the other meter classes. These meters include meters that are provided in support of the PAYG 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.

## 7.2.2 Setting the 2015-16 metering services tariffs

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

The 2015-16 metering services tariffs and charging parameters set out in this Annual Pricing Proposal are based on the price caps determined by the AER in its distribution determination<sup>17</sup>.

TasNetworks' price caps for the provision of metering services are calculated in accordance with the following formula, given by the AER in its distribution determination<sup>18</sup>:

$$P_t = P_{t-1} \times (1 + \Delta CPI_t) \times (1 - X)$$

Table 15 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its metering services tariffs.

**Table 17: Price cap**

Component	Value	Comment
$P_{t-1}$	Various	The price for each metering service for the prior regulatory year (2014-15)
$\Delta CPI_t$	1.33%	The annual percentage change in the Australian Bureau of Statistics Consumer Price Index (CPI) for All Groups, Weighted Average of Eight Capital Cities for the most recent prior year ending in March
X	0.00%	The 'X' factor as specified in the AER's distribution determination

## 7.2.3 Prices for metering services

The proposed 2015-16 prices for each of TasNetworks' metering services tariffs are outlined in Table 16.

**Table 18: Proposed tariffs for metering services**

Tariff	Price c/day)
Domestic LV – single phase	7.442
Domestic LV – multi phase	15.443
Domestic LV – CT meters	19.111
Domestic LV – single phase (remote read)	6.397
Domestic LV – multi phase (remote read)	14.465
Domestic LV – CT meters (remote read)	20.846
Business LV – single phase	7.697
Business LV – multi phase	15.398
Business LV – CT meters	19.911

<sup>17</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

<sup>18</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

Tariff	Price c/day)
Business LV – single phase (remote read)	6.397
Business LV – multi phase (remote read)	14.465
Domestic LV – CT meters (remote read)	20.846
Other meters	13.589

### 7.3 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 the lighting asset is an alternative control service. Only the alternative control service component of public lighting tariffs is discussed in this section.

#### 7.3.1 Overview

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 a quoted service;
- the installation of contract lights, which will be provided on a quoted service basis and is, therefore, categorised as a 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 17 and Table 18.

**Table 19: Public lighting types for public lighting services**

Lighting type	Definition
50W mercury vapour	The provision, maintenance and replacement of TasNetworks owned 50 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
80W mercury vapour – Aeroscreen	The provision, maintenance and replacement of TasNetworks owned 80 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
80W mercury vapour – Artcraft 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. <i>This lighting type is obsolete, with no new connections allowed.</i>
250W mercury vapour	The provision, maintenance and replacement of TasNetworks owned 250 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
400W mercury vapour	The provision, maintenance and replacement of TasNetworks owned 400 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
70W sodium vapour	The provision, maintenance and replacement of TasNetworks owned 70 watt sodium vapour light fittings.
100W sodium vapour	The provision, maintenance and replacement of TasNetworks owned 100 watt sodium vapour light fittings.
150W sodium vapour	The provision, maintenance and replacement of TasNetworks owned 150 watt sodium vapour light fittings.
250W sodium vapour	The provision, maintenance and replacement of TasNetworks owned 250 watt sodium vapour light fittings.
400W sodium vapour	The provision, maintenance and replacement of TasNetworks owned 400 watt sodium vapour light fittings.
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.
2 x 20W fluorescent	The provision, maintenance and replacement of TasNetworks owned 2 x 20 watt fluorescent light fittings. <i>This lighting type has been abolished and is no longer available to any customer.</i>
2 x 40W fluorescent	The provision, maintenance and replacement of TasNetworks owned 2 x 40 watt fluorescent light fittings. <i>This lighting type has been abolished and is no longer available to any customer.</i>
42W compact fluorescent	The provision, maintenance and replacement of TasNetworks owned 42 watt compact fluorescent light fittings.
60W incandescent	The provision, maintenance and replacement of TasNetworks owned 60 watt incandescent light fittings. <i>This lighting type has been abolished and is no longer available to any customer.</i>

**Table 20: Contract lighting types for public lighting services**

Lighting type	Definition
50W mercury vapour	The maintenance of customer owned 50 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
80W mercury vapour	The maintenance of customer owned 80 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
125W mercury vapour	The maintenance of customer owned 125 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
250W mercury vapour	The maintenance of customer owned 250 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
400W mercury vapour	The maintenance of customer owned 400 watt mercury vapour light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
70W sodium vapour	The maintenance of customer owned 70 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.
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.
1 x 20W fluorescent	The maintenance of customer owned 1 x 20 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
2 x 20W fluorescent	The maintenance of customer owned 2 x 20 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
1 x 40W fluorescent	The maintenance of customer owned 1 x 40 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
2 x 40W fluorescent	The maintenance of customer owned 2 x 40 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
3 x 40W fluorescent	The maintenance of customer owned 3 x 40 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
4 x 40W fluorescent	The maintenance of customer owned 4 x 40 watt fluorescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
60W incandescent	The maintenance of customer owned 60 watt incandescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
100W incandescent	The maintenance of customer owned 100 watt incandescent light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
Pole surcharge	The provision, maintenance and replacement of TasNetworks owned public lighting poles. <i>This lighting type is obsolete, with no new connections allowed.</i>



### 7.3.2 Setting the 2015-16 public lighting services tariffs

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

The 2015-16 public lighting services tariffs and charging parameters set out in this Annual Pricing Proposal are based on the price caps determined by the AER in its distribution determination<sup>19</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<sup>20</sup>:

$$P_t = P_{t-1} \times (1 + \Delta CPI_t) \times (1 - X)$$

Table 19 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its public lighting tariffs.

**Table 21: Price cap**

Component	Value	Comment
$P_{t-1}$	Various	The price for each public lighting service for the prior regulatory year (2014-15).
$\Delta CPI_t$	1.33%	The annual percentage change in the Australian Bureau of Statistics Consumer Price Index (CPI) for All Groups, Weighted Average of Eight Capital Cities for the most recent prior year ending in March.
X	2.60%	The 'X' factor as given in the AER's distribution determination.

### 7.3.3 Prices for public lighting services

The proposed 2015-16 prices for each of TasNetworks' public light tariffs are outlined in Table 20.

**Table 22: Proposed tariffs for public lighting types**

Lighting type	Price (c/day)
50W mercury vapour (obsolete)	32.662
80W mercury vapour – Aeroscreen	32.662
80W mercury vapour – Artcraft decorative (obsolete)	51.743
125W mercury vapour (obsolete)	37.609
250W mercury vapour (obsolete)	38.045
400W mercury vapour (obsolete)	42.267
70W sodium vapour	34.786
100W sodium vapour	35.045
150W sodium vapour	38.736
250W sodium vapour	38.855
400W sodium vapour	39.049
150W metal halide	38.736

<sup>19</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

<sup>20</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

Lighting type	Price (c/day)
250W metal halide	38.855
42W compact fluorescent	34.731

The proposed 2015-16 prices for each of TasNetworks' contract light tariffs are outlined in Table 21.

**Table 23: Proposed tariffs for contract lighting types**

Lighting type	Price (c/day)
50W mercury vapour	22.312
80W mercury vapour - Aeroscreen	22.301
125W mercury vapour	23.305
250W mercury vapour	23.374
400W mercury vapour	23.426
70W sodium vapour	22.489
150W sodium vapour	23.985
250W sodium vapour	23.951
400W sodium vapour	24.022
150W metal halide	23.985
250W metal halide	23.951
400W metal halide	23.951
1 x 20W fluorescent	22.363
2 x 20W fluorescent	22.477
1 x 40W fluorescent	22.371
2 x 40W fluorescent	23.482
3 x 40W fluorescent	23.603
4 x 40W fluorescent	24.394
60W incandescent	22.299
100W incandescent	23.290
Pole surcharge	20.463

## 7.4 Fee-based services

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

### 7.4.1 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 at the request of a third party and are typically initiated by way of a service request received from a retailer.

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 and, therefore, a fixed fee can be set in advance with reasonable certainty. That is, the cost inputs in providing these services do not involve material variations between customers.

These fee-based service types are shown in Table 22.

**Table 24: Proposed fee-based services**

Service	Description
<b>Energisation, de-energisation, re-energisation and special reads</b>	
Site visit – no appointment	Visit to a customer’s premises during normal operational hours where no appointment is required on the regular scheduled day for service delivery
Site visit – non-scheduled visit	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	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	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	Visit to a customer’s premises during normal operational hours where no appointment is required on the regular scheduled day for service delivery. Visit is due to a credit issue or where the retailer requests the site to be de-energised without consultation with the customer
Site visit – rectification of illegal connection	Visit to a customer’s premises during normal operational hours to rectify an installation that has been illegally connected
Site visit – interval metering	Visit to a customer’s premises where interval metering exits

Service	Description
<b>Meter alteration</b>	
Tariff alteration – single phase	Visit to a customer’s premises during normal operational hours to add or modify a single phase metering circuit
Tariff alteration – three phase	Visit to a customer’s premises during normal operational hours to add or modify a three phase metering circuit
Adjust time clock	Visit to a customer’s premises during normal operational hours to adjust the time period of an existing time clock
Install pulse outputs	Visit to a customer’s premises during normal operational hours to install pulse output facility
Remove meter	Visit to a customer’s premises during normal operational hours to remove a metering circuit
Meter alteration – after hours visit	Visit to a customer’s premises outside normal operational hours to undertake a meter alteration at the customer’s premises
Meter alteration – wasted visit	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.
<b>Meter test</b>	
Meter test – single phase	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	Visit to a customer’s premises during normal operational hours to test a multi phase meter at the customer’s request
Meter test – CT	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	Visit to a customer’s premises, at the request of the retailer, outside normal operational hours to undertake a meter test
Meter test –wasted visit	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
<b>Supply establishment</b>	
<i>These fee-based services are no longer available to any customer. Customers wishing to establish a permanent connection to the TasNetworks distribution network are now covered by TasNetworks’ connection fees established in accordance with the provisions of the National Energy Customer Framework.</i>	
New connection – after hours	<i>This fee-based service is no longer available to any customer.</i>
Install additional service span – single phase	<i>This fee-based service is no longer available to any customer.</i>
Install additional service span – single phase-additional spans	<i>This fee-based service is no longer available to any customer.</i>
Install additional service span – multiple phase	<i>This fee-based service is no longer available to any customer.</i>
Install additional service span – multiple phase-additional spans	<i>This fee-based service is no longer available to any customer.</i>
New connection-wasted visit	<i>This fee-based service is no longer available to any customer.</i>

Service	Description
<b>Supply abolishment</b>	
Remove service and meters	Remove meters and service connection at customer's request or prior to building demolition during normal operational hours.
Supply abolishment – after hours	Visit to a customer's premises, at the request of the retailer, outside normal operational hours to abolish supply.
Supply abolishment – wasted visit	Visit to a customer's premises to abolish supply where the service could not be completed due to issues at the customer's premises.
<b>Renewable energy connection</b> <i>These fee-based services are no longer available to any customer. Customers wishing to establish a renewable energy connection to the TasNetworks distribution network are now covered by TasNetworks' connection fees established in accordance with the provisions of the National Energy Customer Framework.</i>	
Renewable energy connection	<i>This fee-based service is no longer available to any customer.</i>
Renewable energy connection – after hours	<i>This fee-based service is no longer available to any customer.</i>
Renewable energy connection – wasted visit	<i>This fee-based service is no longer available to any customer.</i>
<b>Temporary builders connection</b> <i>These fee-based services are no longer available to any customer. Customers wishing to establish a temporary connection to the TasNetworks distribution network are now covered by TasNetworks' connection fees established in accordance with the provisions of the National Energy Customer Framework.</i>	
Temporary supply underground – single phase – temporary position	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply underground – three phase – temporary position	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply underground – single phase – permanent position	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply underground – three phase – permanent position	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply overhead – single phase – temporary position	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply overhead – three phase – temporary position	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply overhead – single phase – permanent position	<i>This fee-based service is no longer available to any customer.</i>

Service	Description
Temporary supply overhead – three phase – permanent position	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply – after hours	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply – wasted visit	<i>This fee-based service is no longer available to any customer.</i>
<b>Temporary show and carnival connection</b> <i>These fee-based services are no longer available to any customer. Customers wishing to establish a show or carnival connection can no longer have an unmetered site and should make application for an equivalent temporary or permanent connection to the TasNetworks distribution network in accordance with the provisions of the National Energy Customer Framework.</i>	
Temporary supply – underground	This fee-based service is no longer available to any customer.
Temporary supply – overhead mains	This fee-based service is no longer available to any customer.
Temporary supply – overhead service	This fee-based service is no longer available to any customer.
Temporary supply – after hours	This fee-based service is no longer available to any customer.
Temporary supply – wasted visit	This fee-based service is no longer available to any customer.
<b>Truck tee-up</b>	
Tee-up – initial 30 minutes	Electrical Contractor requested tee-up with overhead crew whilst undertaking work at customer’s installation during normal operational hours.
Tee-up – each additional 15 minutes	Electrical Contractor requested tee-up with overhead crew whilst undertaking work at customer’s installation during normal operational hours.
Tee-up – after hours	Electrical Contractor requested tee-up with overhead crew whilst undertaking work at customer’s installation after normal operational hours.
Tee-up – no truck – after hours	Electrical Contractor requested tee-up with underground crew whilst undertaking work at customer’s installation after normal operational hours.
Tee-up – wasted visit	Electrical Contractor requested tee-up with TasNetworks crew where the works could not be completed due to issues at the customer’s premises or where service connections crew were not required once on site.
<b>Miscellaneous services</b>	
Open turret	Open turret or cabinet during normal operational hours for electrical contractor installing or altering customer’s mains during normal operational hours.

Service	Description
Addition/alteration to connection point	<i>This fee-based service is no longer available to any customer. Customers wishing to modify a connection to the TasNetworks distribution network are now covered by TasNetworks' connection fees established in accordance with the provisions of the National Energy Customer Framework.</i>
Connection of new mains to existing installation	<i>This fee-based service is no longer available to any customer. Customers wishing to modify a connection to the TasNetworks distribution network are now covered by TasNetworks' connection fees established in accordance with the provisions of the National Energy Customer Framework.</i>
Data download	Visit to a customer's premises during normal operational hours to download data from a meter.
Alteration to unmetered supply	Visit to a customer's premises to add or remove a load on an existing unmetered supply site during normal operational hours.
Miscellaneous service	Visit to a customer's premises, at the request of the retailer, during normal operational hours to perform a service that is not described elsewhere.
Miscellaneous service – after hours	Visit to a customer's premises, at the request of the retailer, outside normal operational hours to perform any of the mentioned miscellaneous services.
Miscellaneous service – wasted visit	Visit to a customer's premises during normal operational hours for the requested miscellaneous service where the service could not be completed due to issues at the customer's premises.

#### 7.4.2 Setting the 2015-16 fee-based services tariffs

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

The 2015-16 fee-based services tariffs and charging parameters set out in this Annual Pricing Proposal are based on the price caps determined by the AER in its distribution determination<sup>21</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<sup>22</sup>:

$$P_t = P_{t-1} \times (1 + \Delta CPI_t) \times (1 - X)$$

Table 23 provides details of the price cap calculation that TasNetworks has utilised in the preparation of its fee-based services tariffs.

<sup>21</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

<sup>22</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

**Table 25: Price cap**

Component	Value	Comment
$P_{t-1}$	Various	The price for each fee-based service for the prior regulatory year (2014-15)
$\Delta CPI_t$	1.33%	The annual percentage change in the Australian Bureau of Statistics Consumer Price Index (CPI) for All Groups, Weighted Average of Eight Capital Cities for the most recent prior year ending in March
X	1.70%	The 'X' factor as given in the AER's distribution determination

### 7.4.3 Prices for fee-based services

The proposed 2015-16 prices for each of TasNetworks' fee-based services tariffs are outlined in Table 24.

**Table 26: Proposed tariffs for fee-based services**

Service	Price (\$)
<b>Energisation, de-energisation, re-energisation and special reads</b>	
Site visit – no appointment	53.56
Site visit – non-scheduled visit	120.72
Site visit – same day premium service	311.88
Site visit – after hours	804.84
Site visit – credit action or site issues	78.50
Site visit – interval metering	60.35
<b>Meter alteration</b>	
Tariff alteration – single phase	179.50
Tariff alteration – three phase	244.79
Adjust time clock	58.75
Install pulse outputs	163.19
Remove meter	271.32
Meter alteration – after hours visit	783.28
Meter alteration – wasted visit	97.91
<b>Meter test</b>	
Meter test – single phase	293.73
Meter test – multi phase	587.46
Meter test – CT	652.74
Meter test – after hours	783.28
Meter test –wasted visit	97.91



Service	Price (\$)
<b>Supply abolishment</b>	
Remove service & meters	271.32
Supply abolishment – after hours	783.28
Supply abolishment – wasted visit	162.79
<b>Truck tee-up</b>	
Tee-up – initial 30 minutes	130.28
Tee-up – each additional 15 minutes	53.54
Tee-up – after hours	1,463.79
Tee-up – no truck – after hours	1,302.37
Tee-up – wasted visit	162.79
<b>Miscellaneous services</b>	
Open turret	146.87
Data download	326.36
Alteration to unmetered supply	244.79
Miscellaneous service	130.55
Miscellaneous service – after hours	783.28
Miscellaneous service – wasted visit	162.79
Miscellaneous service – rectification of illegal connection	244.79

## 7.5 Quoted services

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

### 7.5.1 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 (non-standard) services may be received from a customer or retailer on behalf of a customer. TasNetworks provides a range of non-standard services on a quoted basis including, but not limited to:

- removal or relocation of TasNetworks' assets at a customer's (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;
- provision of overhead and underground subdivisions for developers;
- relocation of assets at the request of a third party; and

- services that are provided through a non-standard process at a customer's request (for example, where more frequent meter reading is required).

### 7.5.2 Setting the 2015-16 quoted services tariffs

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

The 2015-16 quoted services tariffs and charging parameters set out in this Annual Pricing Proposal are based on the price caps as determined by the AER in its distribution determination<sup>23</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<sup>24</sup>:

$$P = \sum (\text{Units}_i \times LR_i) + \text{Materials} + \text{Contractors} + \text{OtherCosts} + \text{Overheads}$$

In accordance with the AER's distribution determination TasNetworks is only required to provide a calculation of labour rates ( $LR_i$ ) as a component of this Annual Pricing Proposal.

TasNetworks' price caps for the labour rates within quoted services are calculated in accordance with the formula given by the AER in its distribution determination<sup>25</sup>:

$$LR_i = LR_t \times (\text{CPI}_t / \text{CPI}_{2011})$$

Table 25 provides details of the labour rate cap calculation that TasNetworks has utilised in the preparation of its quoted services tariffs.

**Table 27: Price cap**

Component	Value	Comment
$LR_t$	Various	The price for each quoted service labour rate as given in the AER's distribution determination.
$\text{CPI}_t$	106.8	The index number for the Australian Bureau of Statistics Consumer Price Index (CPI) for All Groups, Weighted Average of Eight Capital Cities for the most recent March quarter.
$\text{CPI}_{2011}$	98.30	The index number for the Australian Bureau of Statistics Consumer Price Index (CPI) for All Groups, Weighted Average of Eight Capital Cities for the March quarter 2011.

TasNetworks provides the following indicative prices for the labour rates that will apply to the provision of quoted services.

### 7.5.3 Labour prices for quoted services

The proposed 2015-16 prices for each of TasNetworks' quoted services tariffs are outlined in Table 26.

<sup>23</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

<sup>24</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

<sup>25</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

**Table 28: Proposed tariffs for quoted services**

<b>Labour</b>	<b>Price (\$/hour)</b>
Apprentice	69.940
Cable joiner	59.610
Customer connections – commercial metering	66.620
Customer connections – service crew	60.020
Designer	74.950
Distribution electrical technician	59.710
Distribution linesman	54.650
Distribution linesman – live line	59.580
Distribution operator	65.020
Electrical inspector	63.710
Field service co-ordinator	82.930
Labourer – overhead	50.480
Meter reader	45.990
Pole tester	50.130
Project manager	75.860

## 8 Proposed tariff variations

### 8.1 Adjustments to tariffs within a regulatory year

Clause 6.18.2(b)(5) of the Rules<sup>26</sup> requires that TasNetworks' Annual 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.

#### 8.1.1 Standard control services

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 2015-16. In this case, TasNetworks would recalculate the charging parameters of the tariff.

New network tariffs will also be created for each ITC customer that connects during 2015-16, in line with the methodology set out in this Annual Pricing Proposal.

TasNetworks does not anticipate any changes to network tariffs within any other tariff classes in the course of the 2015-16 regulatory year.

### 8.2 Variations between the regulatory years 2014-15 and 2015-16

#### 8.2.1 Standard control services

TasNetworks' total revenue has decreased by approximately 5.1 per cent between 2014-15 and 2015-16, while its customer consumption is expected to decrease by approximately 1.50 per cent.

TasNetworks has adopted the following general strategies for its network tariffs for 2015-16. In a number of instances these strategies have remained unchanged from the previous regulatory year. These tariff strategies are:

- the majority of customers will see an increase of no greater than a 9 per cent increase in the daily charge component of their network tariff;
- DUoS and TUoS components of all network tariffs will be rebalanced to ensure an appropriate recovery of these components. This will mean that whilst total DUoS revenue will decrease by approximately 0.6 per cent and total TUoS revenue by approximately 16.1 per cent, individual DUoS and TUoS network tariff components will vary by differing amounts;
- customers on the General Network – Nursing Homes network tariff have previously received a discounted energy rate. In line with TasNetworks' Tariff Strategy, for the 2015-16 regulatory year, the nursing home network tariff has been increased by CPI + 6 per cent, however the process of aligning this tariff with other tariff offerings is being accelerated in subsequent years. The process of removing the discounted energy rate inherent in this tariff has been in progress for a number of years, and commenced during the previous regulatory control period;
- customers on the General Network – Business Curtilage network tariff have previously received a discounted daily charge. In line with TasNetworks' Network Tariff Strategy, for the 2015-16 regulatory year, the discount on the daily charge has been decreased by ten per cent. In the future 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;

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<sup>26</sup> Version 65.

- customers on the Uncontrolled LV heating network tariff have previously received a discounted energy rate. In line with TasNetworks' Network Tariff Strategy, for the 2015-16 regulatory year, the discount on the TUoS energy charge has been removed. In the future the discount on the DUoS energy charge will be removed at an accelerated rate until such a time as the tariff is considered cost reflective; and
- rebalancing to ensure appropriate revenues will be applied to “fine tune” the revenue recovery.

#### **8.2.1.1 Reallocation between fixed and variable costs**

The principles of allocation between fixed and variable costs remain consistent with the previous regulatory year. TasNetworks is conscious of the costs that are borne by low consumption customers and has, therefore, chosen to increase fixed charges in most instances by no more than the maximum year-on-year increase in the total revenue raised from a particular tariff class permitted under the Rules. (For more information on the calculation of this limit, which can vary from year to year, see Section 10.7: Compliance with side constraints). Customers on the TASCURT network tariff will, however, see a larger increase as TasNetworks continues to unwind its curtilage subsidy.

#### **8.2.1.2 Rebalancing of DUoS and TUoS revenues**

TasNetworks anticipates an under recovery of total revenue from its tariffs in 2014-15, with individual network tariff components resulting in an under recovery of both DUoS and TUoS revenues.

TasNetworks has been able to forecast its DUoS and TUoS components to achieve the desired outcome, not only to recover the total allowable revenue, but the TUoS and DUoS components of that revenue also match the expected transmission network charges and the TasNetworks allowable Revenue Cap.

### **8.2.2 Alternative control services**

Alternative control services have increased in price in accordance with the AER's distribution determination<sup>27</sup>.

## **8.3 Changes to certain tariffs**

### **8.3.1 Alternative control services**

#### **8.3.1.1 Fee-based services**

The introduction of the National Energy Customer Framework into the Tasmanian jurisdiction on 1 July 2012 resulted in a number of connection services previously considered to be fee-based services becoming part of the connection processes under chapter 5A of the Rules. This has meant that all supply establishment services, all renewable energy connection services, all temporary builders supplies and certain miscellaneous services have not been available to any customer as a fee-based service since 1 July 2013. These services are now covered as a component of TasNetworks' connection processes.

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<sup>27</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

## 9 Transmission cost recovery

Clauses 6.18.2(b)(6) and 6.18.7 of the Rules<sup>28</sup> allow for the pass through of charges for TUoS services, including any adjustments for under or over recovery. The network tariffs outlined in this Annual Pricing Proposal have been designed with this approach. To comply with the Rules, information reported as part of this Annual Pricing Proposal includes:

### 9.1.1 Expenses:

- regulated transmission charges paid to TasNetworks in its capacity as the licensed transmission network service provider in the Tasmanian region of the National Electricity Market; and
- avoided TUoS payments to embedded generators.

### 9.1.2 Receipts:

- payments received from network users.

### 9.1.3 Adjustments for under/over recovery:

- difference between receipts and expenses.

## 9.2 TUoS Expenses

### 9.2.1 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 within the network tariffs TasNetworks charges customers connected to the distribution network.

### 9.2.2 Standard transmission charges

A number of customers, or groups of customers, may have specially calculated network tariffs. As part of these network tariff 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.

### 9.2.3 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.

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:

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<sup>28</sup> Version 65.

- (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.

Any 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.

### 9.3 TUoS Receipts

#### 9.3.1 Tariff recovery of TUoS

A description of how TUoS is recovered through TasNetworks' standard control network tariffs is given in section 6.2.2.

#### 9.4 TUoS unders and overs account

As a requirement of its distribution determination<sup>29</sup>, the AER requires TasNetworks to provide a TUoS unders and overs account for the most recently completed regulatory year.

Table 27 outlines the TUoS unders and overs calculation and provides separate identification of any under or over recovery relating to prior years included in the current year revenue.

**Table 29: TUoS unders and overs account (\$ million)**

TUoS unders and overs account	year t-2 (actual)	year t-1 (estimate)	year t (forecast)
Revenue from TUoS charges	122.637	115.828	103.775
Less total transmission related payments	125.201	110.677	99.789
Transmission charges to be paid to TNSP	125.114	110.593	99.789
Avoided TUoS payments	0.087	0.084	0.00
Under/over recovery for regulatory year	-2.564	5.151	3.986
TUoS under and overs account			
Nominal WACC	8.28%	8.28%	8.28%
Opening balance	-5.593	-8.832	-3.986
Interest on opening balance	-0.463	-0.731	0.00
Under/over recovery for regulatory year	-2.564	5.151	3.986
Interest on under/over recovery for regulatory year	-0.212	0.427	0.00
Closing balance	-8.832	-3.986	0.00

<sup>29</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

## 10 Compliance with regulatory requirements

### 10.1 DUoS unders and overs account

As a requirement of its distribution determination<sup>30</sup>, the AER requires TasNetworks to provide a DUoS unders and overs account for the most recently completed regulatory year.

Table 28 outlines the DUoS unders and overs calculation and provides separate identification of any under or over recovery relating to prior years included in the current year revenue.

**Table 30: DUoS unders and overs account (\$ million)**

DUoS unders and overs account	year t-2 (actual)	year t-1 (estimate)	year t (forecast)
Revenue from DUoS charges	273.018	289.115	298.762
Less MAR for the relevant year	279.813	284.866	280.870
Allowed revenue ( $AR_t$ )	280.477	284.642	280.631
Transitional ( $transitional_t$ )	-1.512	0.00	0.00
Electrical safety inspection service adjustment ( $ESISC_t$ )	0.696	0.101	0.098
National energy market charge adjustment ( $NEMC_t$ )	0.152	0.122	0.142
Approved pass throughs ( $Passthrough_t$ )	0.00	0.00	0.00
Under/over recovery for regulatory year	-6.795	4.249	17.891
DUoS under and overs account			
Nominal WACC	8.28%	8.28%	8.28%
Opening balance	-12.389	-20.772	-17.891
Interest on opening balance	-1.026	-1.720	0.00
Under/over recovery for regulatory year	-6.795	4.249	17.891
Interest on under/over recovery for regulatory year	-0.563	0.352	0.00
Closing balance	-20.772	-17.891	0.00

### 10.2 Compliance with avoidable and stand-alone cost requirements

Clause 6.18.5(a) of the Rules<sup>31</sup> 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.

<sup>30</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

<sup>31</sup> Version 65.



The Rules<sup>32</sup> 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 below.

### 10.2.1 Stand-alone costs

TasNetworks calculates this amount as the costs of serving all of the customers currently accessing services under that tariff class, if no other tariff classes were being served from TasNetworks' system. This is equal to the costs of installing and maintaining the shared network (which would be solely allocated to that tariff class) and the connection costs designated to that tariff class. It does not, therefore, include costs associated with connection assets designated to other tariff classes.

### 10.2.2 Avoidable cost

TasNetworks calculates this amount as the total cost avoided if that tariff class was not served, while other tariff classes remained served. This is equal to the costs of financing and maintaining the connection assets designated to that tariff class.

### 10.2.3 Process for determining stand-alone and avoidable cost

#### 10.2.3.1 Standard control services

TasNetworks has estimated the stand-alone costs for each tariff class by calculating the total annual costs of operating its distribution network, less the avoidable costs of serving other tariff classes. This approach uses the total MAR as a first step, and then subtracts all costs that would be avoided if no other tariff classes were served. This assumes the existence of the network in its current state.

TasNetworks' assessments of stand-alone cost were conducted using its DCoS model. As noted in section 4.2 of this Annual Pricing Proposal, the DCoS model allocates the building block components of the MAR to assets, then customer groupings, then network tariffs.

TasNetworks interprets the avoidable cost for all tariff classes as being the value of the connection assets for the customers within that tariff class. Shared costs relating to operational areas have been assumed to be unavoidable as these operational areas service multiple network tariff classes.

TasNetworks considers that:

- its shared costs (overheads) – that is the costs of maintaining its corporate operations – are not avoidable for any tariff class. These services would need to be maintained for the remaining tariff classes even if one of the tariff class was no longer served;
- the costs of the shared network – that is, the costs of funding and maintaining the network – are not avoidable for any particular tariff class; and
- the direct costs of supplying each tariff class – being the return on assets, depreciation and operating expenditure on assets that are directly attributable to the customers within that tariff class – are avoidable.

TasNetworks' stand-alone and avoidable costs for each standard control service tariff class are set out below.

#### 10.2.3.2 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.

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<sup>32</sup> Version 65.

The use of a cost based formula for pricing implies that if there were only one alternative control service tariff class provided by TasNetworks, then total revenue for that tariff class would equal the total cost of serving that tariff class (where the total cost incurred in the provision of the service for that tariff class includes the full cost of assets used by all alternative control services). Given that TasNetworks provides more than one alternative control service tariff class, shared assets such as depots and vehicles are shared between all alternative control services tariff classes. This means that the revenue received from one alternative control services tariff class will be less than the stand-alone cost of that tariff class.

The avoidable cost of alternative control services is the cost that would be incurred in the delivery of the services to a tariff class if no services were provided to any other tariff class. The only avoided costs relating to alternative control services relate to labour costs charged on an hourly basis and materials consumed during the course of providing the service. Given that the formula used to derive prices for fee-based and quoted services includes a component of shared costs, the total revenue for tariff classes will exceed the avoidable portion.

TasNetworks has not undertaken any quantitative analysis of its stand-alone and avoidable costs for alternative control services.

#### **10.2.4 Comparison of avoidable costs, expected revenue and stand-alone costs**

The tables below demonstrates that, in accordance with clause 6.18.5(a) of the Rules<sup>33</sup>, for each network tariff and tariff class, the 2015-16 expected revenue for each network tariff and tariff class lies on or between the lower bound avoidable cost and an upper bound stand-alone cost.

TasNetworks' cost and pricing models calculate three data outcomes that are necessary to demonstrate compliance with this principle:

- The stand-alone cost of serving a tariff class. TasNetworks calculates this amount as the costs of serving all of the customers currently accessing services under that tariff class, if no other tariff classes were being served from TasNetworks' system. This is equal to the costs of installing and maintaining the shared network (which would be solely allocated to that tariff class) and the connection costs designated to that tariff class. It therefore does not include costs associated with connection assets designated to other tariff classes;
- The expected revenue from a tariff class; and
- The avoidable costs of serving a tariff class. TasNetworks calculates this amount as the total cost that would be avoided if that tariff class was not served, while other tariff classes continued to be served. This is equal to the costs of financing and maintaining the connection assets designated to that tariff class.

The outcomes of TasNetworks' cost and pricing models are set out in Table 29. The Table shows the stand-alone and avoidable costs for each network tariff, compared to the expected revenue from network tariffs.

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<sup>33</sup> Version 65.

**Table 31: Stand-alone and avoidable cost boundaries**

Tariff class	Tariff	Avoidable cost (\$m)	Expected revenue (\$m) excluding side constraint adjustment	Stand-alone cost (\$m)
ITC	Individual Tariff Calculation (TASCUS)	0.164	1.755	234.764
HV	Business HV kVA Specified Demand >2MVA (TAS15)	0.093	3.483	234.693
	Business HV kVA Specified Demand (TASSDM)	0.292	6.456	234.892
Irrigation	Irrigation LV TOU (TAS75)	1.291	8.262	235.891
Large LV	Business LV kVA Demand (TAS82)	0.672	28.466	235.272
Small LV	Business LV General (TAS22)	2.297	44.237	236.897
	Business LV Nursing Homes (TAS34)	0.237	1.860	234.837
	General Network – Business, Curtilage (TASCURT)	0.203	2.563	234.803
	Business LV TOU (TAS94)	1.949	31.781	236.549
Residential	Residential LV General (TAS31)	6.489	121.236	241.089
	Residential LV PAYG TOU / Residential LV TOU (TAS92) (TAS93)	0.019	0.907	234.619
	Residential LV PAYG (TAS101)	0.443	19.943	235.043
Uncontrolled Energy	Uncontrolled LV Heating (TAS41)	0.000	22.678	234.600
Controlled Energy	Controlled LV Energy – Off Peak with afternoon boost (TAS61)	0.000	1.388	234.600
	Controlled LV Energy – Night period only (TAS63)	0.000	0.001	234.600
Unmetered	UMS LV General (TASUMS)	0.000	1.068	234.602
Streetlights	UMS LV Public Lighting (TASUMSSL)	0.007	2.474	234.607

Tariff class	Tariff	Avoidable cost (\$m)	Expected revenue (\$m) excluding side constraint adjustment	Stand-alone cost (\$m)
Embedded Generator <sup>1</sup>	Residential LV Import Transitional (TASX1I)	0.000	0.000	0.000
	Business LV Import Transitional (TASX2I)	0.000	0.000	0.000
	Residential LV Import Fair and Reasonable (TASX4I)	0.000	0.000	0.000
	Business LV Import Fair and Reasonable (TASX5I)	0.000	0.000	0.000
	Non-Qualifying Import (TASX6I)	0.000	0.000	0.000

1 As there are no charges for this tariff, this calculation has been set to zero.

The outputs from TasNetworks' cost and pricing models are also set out in Table 30. The Table shows the stand-alone and avoidable costs for each tariff class, compared to the revenue expected to be raised from the network tariffs within that tariff class.

**Table 32: Stand-alone and avoidable cost boundaries**

Tariff class	Avoidable cost (\$m)	Expected revenue (\$m) excluding side constraint adjustment	Stand-alone cost (\$m)
ITC	0.164	1.755	234.764
HV	0.385	9.938	469.585
Irrigation	1.291	8.262	235.891
Large LV	0.672	28.466	235.272
Small LV	4.687	80.441	943.087
Residential	6.951	142.086	710.751
Uncontrolled Energy	0.000	22.678	234.600
Controlled Energy	0.000	1.389	469.200
Unmetered	0.002	1.068	234.602
Streetlights	0.007	2.474	234.607
Embedded Generation <sup>1</sup>	0.000	0.000	0.000

1 As there are no charges for this tariff, this calculation has been set to zero.

### 10.3 Long run marginal cost

Clause 6.18.5(b)(1) of the Rules<sup>34</sup> requires that each charging parameter for a tariff class take into account the long run marginal cost for the service or, in the case of a charging parameter, for the element of the service to which the charging parameter relates.

TasNetworks interprets long run marginal cost (LRMC) as the investment required to sustain or expand long term capacity in a network.

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. TasNetworks' 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;
- 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.

### 10.4 Transaction costs

Clause 6.18.5(b)(2)(i) of the Rules<sup>35</sup> 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 in any material way. TasNetworks' charging parameters and network tariffs are well known to its 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.

### 10.5 Response to price signals

Clause 6.18.5(b)(2)(ii) of the Rules<sup>36</sup> 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 whether customers of the relevant tariff class are able or likely to respond to price signals.

The charging parameter within TasNetworks' network tariffs has been developed such that customers are able to and are likely to respond to price signals.

The fixed charging parameter has been designed to recover the fixed cost of a customer's connection assets. Network users can manage these costs by ensuring that the dedicated connection assets installed match their load and reliability requirements.

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<sup>34</sup> Version 65.

<sup>35</sup> Version 65.

<sup>36</sup> Version 65.

The demand charges provide a strong signal to customers regarding the impact of demand on the cost of the shared network, and an inducement to reduce their maximum demand.

The volume charge provides a signal that increased customer usage results in cost increases in operations. If customers use more electricity, then they will bear an increasing portion of the MAR and their network charges will rise as a result. Customers may manage the amount of their charges by reducing their usage.

## 10.6 Tariff adjustment to address revenue shortfalls

Clause 6.18.5(c) of the Rules<sup>37</sup> provides that if, as a result of the operation of clause 6.18.5(b)<sup>38</sup>, TasNetworks may not recover its expected revenue, tariffs will be adjusted in accordance with clause 6.18.5(c) of the Rules<sup>39</sup>, so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

TasNetworks does not need to apply this clause of the Rules<sup>40</sup> as the operation of clause 6.18.5(b)<sup>41</sup> does not impact on TasNetworks' ability to recover the expected revenue.

## 10.7 Compliance with side constraints

Within a given regulatory control period, the Rules<sup>42</sup> require that the revenue raised from a particular tariff class through tariffs applying to standard control services must not increase from year to year by more than the permissible percentages set out in the Rules. This limitation on tariffs and the revenue they can recover is referred to as a side constraint.

In accordance with the AER's distribution determination<sup>43</sup>, the following formula is to be used to determine side constraints for each tariff class:

$$\frac{\sum_{t=1}^n d_t^j \times q_t^j}{\sum_{t=1}^n d_{t-1}^j \times q_t^j} \leq (1 + \Delta CPI_t) \times (1 - X_t) \times (1 + 2\%) \times (1 + S_t) \pm \text{passthrough}_t \pm \text{ESISC}_t \pm \text{NEMC}_t \pm \text{DUOS}_t \pm \text{transitional}_t$$

where each tariff class 'j' has up to 'm' components, and where:

- $d_t^j$  is the proposed price for component 'j' of the tariff class for year t.
- $d_{t-1}^j$  is the price charged by the DNSP for component 'j' of the tariff class in year t-1.
- $q_t^j$  is the forecast quantity of component 'j' of the tariff class in year t.
- $\Delta CPI_t$  is the annual percentage change in the ABS Consumer Price Index All Groups, Weighted Average of Eight Capital Cities from March in regulatory year t-2 to March in regulatory year t-1.
- $X_t$  is the X factor for each year of the regulatory control period. If  $X > 0$ , then X will be set equal to zero for the purposes of the side constraint formula.

<sup>37</sup> Version 65.

<sup>38</sup> Version 65.

<sup>39</sup> Version 65.

<sup>40</sup> Version 65.

<sup>41</sup> Version 65.

<sup>42</sup> Version 65.

<sup>43</sup> Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17, April 2012.

- $S_t$  is the STPIS factor sum of the raw s-factors for all reliability of supply and customer service parameters (as applicable) to be applied in regulatory year t.
- $passthrough_t$  is an annual adjustment factor that reflects the pass through amounts approved by the AER with respect to regulatory year t.
- $ESISC_t$  is the actual overs or unders from the estimated ESISC costs in regulatory year t-1.
- $NEMC_t$  is the actual overs or unders from the estimated NEMC costs in regulatory year t-1.
- $DUoS_t$  is an annual adjustment factor related to the balance of the DUoS unders and overs account with respect to regulatory year t.
- $transitional_t$  is a transitional factor revenue adjustment from the current regulatory period that will not be ongoing in the forthcoming regulatory period.

Clause 6.18.6(b) of the Rules<sup>44</sup> applies side constraints in relation to weighted average revenue increases between regulatory years.

As TasNetworks' X factor for the 2015-16 regulatory year is 1.50 and therefore greater than zero, when applying the AER's side constraint formula, TasNetworks has set the value of  $X_t$  to zero for the purposes of the side constraint formula.

TasNetworks confirms that each of its tariff classes for the 2015-16 regulatory year are within the weighted average revenue increases allowed in accordance with clause 6.18.6 of the Rules<sup>45</sup> and the AER's side constraint formula.

The results of TasNetworks' compliance with the side constraint requirements are shown in Table 31.

**Table 33: Side constraint compliance for 2015-16**

Tariff class	Weighted average revenue 2014-15 (\$m)	Anticipated revenue 2015-16 (\$m)	% change (calculated)	% change (allowed by side constraint)
ITC	1.759	1.755	-0.20	8.84
HV	9.207	9.938	7.94	8.84
Irrigation	7.712	8.262	7.13	8.84
Large LV	26.593	28.466	7.04	8.84
Small LV	76.298	80.441	5.43	8.84
Residential	135.245	142.086	5.06	8.84
Uncontrolled Energy	20.947	22.678	8.26	8.84
Controlled Energy	1.279	1.389	8.57	8.84
Unmetered	0.982	1.068	8.80	8.84
Streetlights	2.276	2.474	8.74	8.84

<sup>44</sup> Version 65.

<sup>45</sup> Version 65.

## 11 Customer price impacts

### 11.1 Expected price trends (2012 – 2017)

#### 11.1.1 Standard control services

TasNetworks' pricing 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.

The ongoing average price increases across the regulatory control period are necessary for TasNetworks to deliver the capital and operating expenditure programs which support development in Tasmania, as well as maintaining reliability and security of supply.

Table 32 provides the difference in the charges between 2014-15 and 2015-16 for each ITC<sup>46</sup> network tariff. This Table is used to give an estimate of the percentage component change for each customer.

**Table 34: Estimated percentage price change by ITC tariff 2014-15 to 2015-16**

Tariff class	NMI / Tariff	Tariff Component	DUoS charge 2014-15 (cents)	DUoS charge 2015-16 (cents)	Change (%)
ITC	Individual Tariff Calculation	Daily Charge			
		Specified connection			
		Excess connection			
	Individual Tariff Calculation	Daily Charge			
		Energy Charge			
		Specified demand			
		Excess demand			
	Individual Tariff Calculation	Daily Charge			
		Energy Charge			
		Specified demand			
		Excess demand			
	Individual Tariff Calculation	Daily Charge			
		Energy Charge			
		Specified demand			
		Excess demand			
	Individual Tariff Calculation	Daily Charge			
		Energy Charge			
		Specified demand			
		Excess demand			

<sup>46</sup> ITC tariff rates are confidential.



Tariff class	NMI / Tariff	Tariff Component	DUoS charge 2014-15 (cents)	DUoS charge 2015-16 (cents)	Change (%)
ITC	Individual Tariff Calculation	Daily Charge			
		Energy Charge			
		Specified demand			
		Excess demand			
HV	TAS15	Daily	1,892.600	2,062.900	9.00
		Peak energy	1.794	1.936	7.92
		Shoulder energy	0.486	0.524	7.82
		Off-peak energy	0.061	0.066	8.20
		Specified demand	11.399	12.300	7.90
		Excess demand	56.995	61.500	7.90
		Specified connection	0.414	0.447	7.97
		Excess connection	2.070	2.235	7.97

Table 33 provides the difference in the charges between 2014-15 and 2015-16 for each locational TUoS charge. This Table is used to give an estimate of the percentage component change for each transmission connection point.

**Table 35: Estimated percentage price change for locational TUoS charges 2014-15 to 2015-16**

Transmission node identifier	Transmission node description	TUoS charge 2014-15 c/kVA/day	TUoS charge 2015-16 c/kVA/day	Change (%)
TAL2	Arthurs Lake	19.379	16.929	-12.64
TAV2	Avoca	26.214	21.442	-18.20
TBU3	Burnie	20.711	17.888	-13.63
TBW2	Bridgewater	22.070	19.099	-13.46
TDB2	Derwent Bridge	347.199	282.865	-18.53
TDE2	Derby	44.172	36.264	-17.90
TDP2	Devonport	23.186	19.809	-14.56
TEB2	Emu Bay	28.391	24.343	-14.26
TEL2	Electrona	29.253	23.321	-20.59
TKE2	Kermandie	45.268	37.101	-18.04
TKI2	Kingston 11kV	27.911	17.435	-37.53
TKI3	Kingston 33kV	25.391	22.151	-12.76
TKR2	Knights Road	30.529	24.528	-19.66
TMB2	Meadowbank	24.252	20.756	-14.42
TNN2	New Norfolk	25.065	21.355	-14.80

Transmission node identifier	Transmission node description	TUoS charge 2014-15 c/kVA/day	TUoS charge 2015-16 c/kVA/day	Change (%)
TNT2	Newton	47.156	42.482	-9.91
TPL2	Port Latta	25.885	20.487	-20.85
TPM3	Palmerston	25.227	19.776	-21.61
TQT2	Queenstown	35.876	30.070	-16.18
TRA2	Railton	23.116	19.621	-15.12
TRB2	Rosebery	23.542	19.362	-17.76
TSD2	Scottsdale	47.072	39.197	-16.73
TSM2	St Marys	34.937	27.957	-19.98
TSO2	Sorell	29.153	24.135	-17.21
TSR2	Savage River	27.897	22.067	-20.90
TST2	Smithton	31.357	26.125	-16.69
TTB2	Triabunna	34.632	28.620	-17.36
TTU2	Tungatinah	93.500	65.515	-29.93
TUL2	Ulverstone	22.242	17.526	-21.20
TWA2	Waddamana	41.288	34.929	-15.40
TWV2	Wesley Vale	51.852	40.056	-22.75
TVN1	Hobart Virtual	22.090	19.052	-13.75
TVN2	Tamar Virtual	18.652	16.583	-11.09

Table 34 provides the difference in the charges between 2014-15 and 2015-16 for each network tariff. This Table is used to give an estimate of the percentage component change for each customer.

**Table 36: Estimated percentage price change by tariff class 2014-15 to 2015-16**

Tariff class	Tariff	Tariff Component	NUoS charge 2014-15 (cents)	NUoS charge 2015-16 (cents)	Change (%)
HV	TAS15	Daily	1,892.600	2,062.900	9.00
		Peak energy	1.794	1.936	7.92
		Shoulder energy	0.486	0.524	7.82
		Off-peak energy	0.061	0.066	8.20
		Specified demand	11.399	12.300	7.90
		Excess demand	56.995	61.500	7.90
		Connection specified demand	0.414	0.447	7.97
		Excess connection specified demand	2.070	2.235	7.97

Tariff class	Tariff	Tariff Component	NUoS charge 2014-15 (cents)	NUoS charge 2015-16 (cents)	Change (%)	
HV	TASSDM	Daily	142.805	155.657	9.00	
		Peak energy	1.624	1.450	-10.71	
		Shoulder energy	1.220	1.092	-10.49	
		Off-peak energy	0.703	0.619	-11.95	
		Specified demand	23.491	24.989	6.38	
		Excess demand	234.910	249.890	6.38	
Irrigation	TAS75	Daily	200.964	219.051	9.00	
		Peak energy	15.642	15.614	-0.18	
		Shoulder energy	9.582	9.585	0.03	
		Off-peak energy	1.498	1.489	-0.60	
Large LV	TAS82	Daily	204.090	222.458	9.00	
		Energy	3.098	3.119	0.68	
		Demand	52.621	51.766	-1.62	
Small LV	TAS22	Daily	41.820	45.584	9.00	
		Energy	15.748	15.555	-1.23	
	TAS34	Daily	41.820	45.584	9.00	
		1 <sup>st</sup> 500kWh energy	15.748	15.555	-1.23	
		Remaining energy	8.216	8.818	7.33	
	TASCURT	Daily charge	25.092	31.909	27.17	
		Energy	15.748	15.555	-1.23	
	TAS94	Daily	42.667	46.518	9.00	
		Peak energy	14.637	15.029	2.68	
		Shoulder energy	9.422	9.601	1.90	
		Off-peak energy	1.546	1.552	0.39	
	Residential	TAS31	Daily	41.820	45.584	9.00
Energy			15.748	15.555	-1.23	
TAS101		Daily	41.820	45.584	9.00	
		Energy charge	8.142	8.233	1.12	
TAS93 / TAS92		Daily charge	41.820	45.584	9.00	
		Peak energy	13.670	15.029	9.94	
		Shoulder energy	8.460	9.406	11.18	
		Off-peak energy	1.535	1.552	1.111	
Uncontrolled Energy		TAS41	Daily	4.528	4.936	9.01
			Energy	4.744	5.206	9.74

Tariff class	Tariff	Tariff Component	NUoS charge 2014-15 (cents)	NUoS charge 2015-16 (cents)	Change (%)
Controlled Energy	TAS61	Daily	8.489	9.253	9.00
		Energy	1.670	1.713	2.57
	TAS63	Daily	8.489	9.253	9.00
		Energy	1.496	1.530	2.27
Unmetered	TASUMS	Daily	41.820	45.584	9.00
		Energy	18.023	18.400	2.09
Streetlights	TASUMSSL	Demand	0.144	0.148	2.78

### 11.1.2 Alternative control services

The price changes between 2014-15 and 2015-16 for alternative control services are provided in the following tables.

#### 11.1.2.1 Metering services

Table 35 provides the difference in the charges between 2014-15 and 2015-16 for the provision of metering services.

**Table 37: Estimated percentage price change 2014-15 to 2015-16**

Tariff	Price 2014-15 (c/day)	Price 2015-16 (c/day)	Percentage change (%)
Domestic LV – single phase	7.344	7.442	1.33
Domestic LV – multi phase	15.240	15.443	1.33
Domestic LV – CT meters	18.860	19.111	1.33
Domestic LV – single phase (remote read)	6.313	6.397	1.33
Domestic LV – multi phase (remote read)	14.275	14.465	1.33
Domestic LV – CT meters (remote read)	20.572	20.846	1.33
Business LV – single phase	7.596	7.697	1.33
Business LV – multi phase	15.196	15.398	1.33
Business LV – CT meters	19.650	19.911	1.33
Business LV – single phase (remote read)	6.313	6.397	1.33
Business LV – multi phase (remote read)	14.275	14.465	1.33
Business LV – CT meters (remote read)	20.572	20.846	1.33

Tariff	Price 2014-15 (c/day)	Price 2015-16 (c/day)	Percentage change (%)
Other meters (PAYG)	13.411	13.589	1.33

### 11.1.2.2 Public lighting services

Table 36 provides the difference in the charges between 2014-15 and 2015-16 for the provision of public lighting services.

**Table 38: Estimated percentage price change 2014-15 to 2015-16**

Tariff	Price 2014-15 (c/day)	Price 2015-16 (c/day)	Percentage change (%)
50W mercury vapour	33.094	32.662	-1.31
80W mercury vapour – Aeroscreen	33.094	32.662	-1.31
80W mercury vapour – Artcraft decorative	52.427	51.743	-1.30
125W mercury vapour	38.106	37.609	-1.30
250W mercury vapour	38.548	38.045	-1.30
400W mercury vapour	42.826	42.267	-1.31
70W sodium vapour	35.246	34.786	-1.31
100W sodium vapour	35.508	35.045	-1.30
150W sodium vapour	39.248	38.736	-1.30
250W sodium vapour	39.369	38.855	-1.31
400W sodium vapour	39.565	39.049	-1.30
150W metal halide	39.248	38.736	-1.30
250W metal halide	39.369	38.855	-1.31
42W compact fluorescent	35.190	34.731	-1.30

Table 37 provides the difference in the charges between 2014-15 and 2015-16 for the provision of contract lighting services.

**Table 39: Estimated percentage price change 2014-15 to 2015-16**

Tariff	Price 2014-15 (c/day)	Price 201516 (c/day)	Percentage change (%)
50W mercury vapour	22.607	22.312	-1.30
80W mercury vapour	22.596	22.301	-1.31
125W mercury vapour	22.613	23.305	-1.30
250W mercury vapour	23.683	23.374	-1.30
400W mercury vapour	23.736	23.426	-1.31
70W sodium vapour	22.786	22.489	-1.30
150W sodium vapour	24.302	23.985	-1.30
250W sodium vapour	24.268	23.951	-1.31
400W sodium vapour	24.340	24.022	-1.31
150W metal halide	24.302	23.985	-1.30
250W metal halide	24.268	23.951	-1.31
400W metal halide	24.268	23.951	-1.31
1 x 20W fluorescent	22.659	22.363	-1.31
2 x 20W fluorescent	22.774	22.477	-1.30
1 x 40W fluorescent	22.667	22.371	-1.31
2 x 40W fluorescent	23.792	23.482	-1.30
3 x 40W fluorescent	23.915	23.603	-1.30
4 x 40W fluorescent	24.716	24.394	-1.30
60W incandescent	22.594	22.299	-1.31
100W incandescent	23.598	23.290	-1.31
Pole surcharge	20.733	20.463	-1.30

### 11.1.2.3 Fee-based services

Table 38 provides the difference in the charges between 2014-15 and 2015-16 for the provision of fee-based services.

**Table 40: Estimated percentage price change 2014-15 to 2015-16**

Tariff	Price 2014-15 (\$)	Price 2015-16 (\$)	Percentage change (%)
<b>De-energisation, re-energisation and special reads</b>			
Site visit – no appointment	53.77	53.56	-0.39
Site visit – non scheduled visit	121.20	120.72	-0.40
Site visit – same day premium service	313.11	311.88	-0.39
Site visit – after hours	808.01	804.84	-0.39
Site visit – credit action or site issues	78.81	78.50	-0.39
Site visit – interval metering	60.59	60.35	-0.40
<b>Meter alteration</b>			
Tariff alteration – single phase	180.21	179.50	-0.39
Tariff alteration – three phase	245.75	244.79	-0.39
Adjust time clock	58.98	58.75	-0.39
Install pulse outputs	163.83	163.19	-0.39
Remove meter	272.39	271.32	-0.39
Meter alteration – after hours visit	786.37	783.28	-0.39
Meter alteration – wasted visit	98.30	97.91	-0.40
<b>Meter test</b>			
Meter test – single phase	294.89	293.73	-0.39
Meter test – multi phase	589.78	587.46	-0.39
Meter test – CT	655.31	652.74	-0.39
Meter test – after hours	786.37	783.28	-0.39
Meter test –wasted visit	98.30	97.91	-0.40
<b>Supply abolishment</b>			
Remove service & meters	272.39	271.32	-0.39
Supply abolishment – after hours	786.37	783.28	-0.39
Supply abolishment – wasted visit	163.43	162.79	-0.39
<b>Truck tee-up</b>			
Tee-up – initial 30 minutes	130.79	130.28	-0.39
Tee-up – each additional 15 minutes	53.75	53.54	-0.39
Tee-up – after hours	1,469.56	1,463.79	-0.39
Tee-up – no truck – after hours	1,307.50	1,302.37	-0.39
Tee-up – wasted visit	163.43	162.79	-0.39

Tariff	Price 2014-15 (\$)	Price 2015-16 (\$)	Percentage change (%)
<b>Miscellaneous services</b>			
Open turret	147.45	146.87	-0.39
Data download	327.65	326.36	-0.39
Alteration to unmetered supply	245.75	244.79	-0.39
Miscellaneous service	131.06	130.55	-0.39
Miscellaneous service – after hours	786.37	783.28	-0.39
Miscellaneous service – wasted visit	163.43	162.79	-0.39
Miscellaneous service – rectification of illegal connection	245.75	244.79	-0.39



#### 11.1.2.4 Quoted services

Table 39 provides the difference in the labour rate charges between 2014-15 and 2015-16 for the provision of quoted services.

**Table 41: Estimated percentage price change 2014-15 to 2015-16**

Tariff	Price 2014-15 (\$/hour)	Price 2015-16 (\$/hour)	Percentage change (%)
Apprentice	73.00	69.94	-4.19
Cable jointer	60.56	59.61	-1.57
Customer connections – commercial metering	67.57	66.62	-1.41
Customer connections – service crew	60.86	60.02	-1.38
Designer	75.90	74.95	-1.25
Distribution electrical technician	60.60	59.71	-1.47
Distribution linesman	55.41	54.65	-1.37
Distribution linesman – live line	60.43	59.58	-1.41
Distribution operator	65.36	65.02	-0.52
Electrical inspector	64.85	63.71	-1.76
Field service co-ordinator	84.74	82.93	-2.14
Labourer – overhead	51.06	50.48	-1.14
Meter reader	46.55	45.99	-1.20
Pole tester	50.75	50.13	-1.22
Project manager	76.92	75.86	-1.38

## 12 Tariff development

TasNetworks has previously highlighted network tariff structures and proposed changes within its annual pricing proposals. Various network tariffs have been made obsolete or are under an arrangement that is discussed in the Network Tariff Application and Price Guide. The Network Tariff Application and Price Guide also provides details of the alternative tariffs for customers to transition over time.

There will be no change to this process within the 2015-16 regulatory year.

### 12.1 Future tariff changes

In light of the rapidly changing external environment, TasNetworks' longer term tariff strategy is under continuous review to ensure the most efficient outcomes are delivered for customers in line with the pricing principles outlined in section 4.1.

#### 12.1.1 Standard control services

No further changes to standard control services are currently contemplated. TasNetworks will continue to consult on issues relating to network tariffs and pricing throughout the 2012-17 regulatory control period and include information on expected price trends and future tariff development in its Annual Pricing Proposals.

#### 12.1.2 Alternative control services

No further changes to alternative control services are currently contemplated.

### 13 Audit certification

Clause 6.18.8 of the Rules<sup>47</sup> 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 TasNetworks provides audit certification from Synateq confirming that TasNetworks has completed this Annual Pricing Proposal in accordance with the requirements of the Rules and the AER's distribution determination.

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<sup>47</sup> Version 65.

## 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 in support of this Annual Pricing Proposal.

TasNetworks considers that the sections within, or attachments to this Annual Pricing Proposal identified in the following table, Table 41, 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 Pricing Proposal or any attachment, TasNetworks has redacted those confidential parts and provided a 'public' version of the Annual Pricing Proposal or the attachment. Where TasNetworks considers that an entire attachment should remain confidential it has not provided a 'public' version.

**Table 42: Confidential information**

Reference	Title	Topic	Description	Category	Explanation	Detriment from disclosure
PP008	TasNetworks DCoS Model	Distribution Pricing	TasNetworks methodology for allocating revenue to customer classes	Other	Model represents TasNetworks intellectual property	Model and methodology could be widely applied without TasNetworks consent
PP009	TasNetworks DCoS to Tariff Model	Distribution Pricing	TasNetworks methodology for allocating revenue to customer classes	Other	Model represents TasNetworks intellectual property	Model and methodology could be widely applied without TasNetworks consent
PP010	AER Tariff Reconciliation Model	Distribution Pricing	Contains	Market intelligence	Contains individual negotiated network tariffs	May undermine TasNetworks ability to negotiate individual tariffs

## 15 Appendix

TasNetworks' compliance with these requirements is set out in Table 41.

**Table 43: Compliance obligations under the Rules**

Clause	Pricing Proposal Requirement	Reference
6.18.2(a)(2)	A DNSP must submit to the AER, at least two months before the commencement of the second and each subsequent regulatory year of the regulatory control period, a further pricing proposal (an annual pricing proposal) for the relevant regulatory year.	This Annual Pricing Proposal
6.18.2(b)(1)	A pricing proposal must set out the tariff classes that are to apply for the relevant regulatory year.	Section 6 Section 7
6.18.2(b)(2)	A pricing proposal must set out the proposed tariffs for each tariff class.	Section 6 Section 7
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 6 Section 7
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 10
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 8
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 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.	Section 10
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 10
6.18.3(a)	A pricing proposal must define the tariff classes into which retail customers for direct control services are divided.	Section 5 Section 6.1 Section 7

Clause	Pricing Proposal Requirement	Reference
6.18.3(b)	Each customer for direct control services must be a member of 1 or more tariff classes.	Section 5
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 5 Section 6 Section 7
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 5
6.18.3(d)(2)	A tariff class must be constituted with regard to the need to avoid unnecessary transaction costs.	Section 10
6.18.4(a)(1)	In formulating provisions of a distribution determination governing the assignment of retail customers to tariff classes or the re-assignment of retail customers from one tariff class to another, the AER must have regard to the principle that customers should be assigned to tariff classes on the basis of one or more of the following factors: <ul style="list-style-type: none"> <li>(i) the nature and extent of their usage;</li> <li>(ii) the nature of their connection to the network;</li> <li>(iii) whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a regulatory obligation or requirement.</li> </ul>	Section 5
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 5
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 5.2
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 5

Clause	Pricing Proposal Requirement	Reference
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 5
6.18.5(a)	For each tariff class, the revenue expected to be recovered should lie on or between: <ul style="list-style-type: none"> <li>(1) an upper bound representing the stand alone cost of serving the retail customers who belong to that class; and</li> <li>(2) a lower bound representing the avoidable cost of not serving those retail customers.</li> </ul>	Section 10
6.18.5(b)(1)	A tariff, and if it consists of two or more charging parameters, each charging parameter for a tariff class must take into account the long run marginal cost for the service or, in the case of a charging parameter, for the element of the service to which the charging parameter relates.	Section 10
6.18.5(b)(2)	A tariff, and if it consists of two or more charging parameters, each charging parameter for a tariff class must be determined having regard to: <ul style="list-style-type: none"> <li>(i) transaction costs associated with the tariff or each charging parameter; and</li> <li>(ii) whether retail customers of the relevant tariff class are able or likely to respond to price signals.</li> </ul>	Section 10
6.18.5(c)	If, however, as a result of the operation of paragraph (b), the DNSP may not recover the expected revenue, the provider must adjust its tariffs so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.	Section 10
6.18.6(a)	This clause applies only to tariff classes related to the provision of standard control services.	Section 10
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 10
6.18.6(c)	The permissible percentage is the greater of the following: <ul style="list-style-type: none"> <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>	Section 10

Clause	Pricing Proposal Requirement	Reference
6.18.6(d)	<p>In deciding whether the permissible percentage has been exceeded in a particular regulatory year, the following are to be disregarded:</p> <ol style="list-style-type: none"> <li>(1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13;</li> <li>(2) the recovery of revenue to accommodate pass through of designated pricing proposal charges to retail customers; and</li> <li>(3) the recovery of revenue to accommodate pass through of jurisdictional scheme amounts for approved jurisdictional schemes.</li> <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(l).</li> </ol>	Section 10
6.18.6(e)	<p>This clause does not, however, limit the extent a tariff for retail customers with remotely-read interval metering or other similar metering technology may vary according to the time or other circumstances of the customer's usage.</p>	Section 10
6.18.7(a)	<p>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 for transmission use of system services.</p>	Section 9
6.18.7(b)	<p>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).</p>	Section 9
6.18.7(c)	<p>The over and under recovery amount must be calculated in a way that:</p> <ol style="list-style-type: none"> <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> <li>(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</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> </ol>	Section 9
6.18.7(d)	<p>Notwithstanding anything else in this clause 6.18.7, a DNSP may not recover charges under this clause to the extent these are:</p> <ol style="list-style-type: none"> <li>(1) recovered through the Distribution Network Service Provider's annual revenue requirement;</li> <li>(2) recovered under clause 6.18.7A; or</li> <li>(3) recovered from another Distribution Network Service Provider.</li> </ol>	Section 9



Clause	Pricing Proposal Requirement	Reference
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.
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)	<p>The over and under recovery amount must be calculated in a way that:</p> <ol style="list-style-type: none"> <li data-bbox="408 645 1054 898">(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 data-bbox="408 913 1054 1003">(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 data-bbox="408 1019 1054 1137">(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> </ol>	There are no jurisdictional schemes applicable to TasNetworks.

## 16 Attachments

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

**Table 44: Attachments**

Reference	Title
PP001	DCoS Methodology
PP002	DCoS to Tariff Methodology
PP003	Network Tariff Application and Price Guide
PP004	Metering Services Application and Price Guide
PP005	Public Lighting Application and Price Guide
PP006	Fee-based Services Application and Price Guide
PP007	Quoted Services Application and Price Guide
PP008	TasNetworks DCoS Model (confidential)
PP009	TasNetworks DCoS to Tariff Model (confidential)
PP010	AER Tariff Reconciliation Model (confidential)
PP011	Pricing Proposal Summary
PP012	Synateq Audit Certification

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## 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
CT	Current Transformer
DCoS	Distribution Cost of Supply
DNSP	Distribution Network Service Provider
DUoS	Distribution Use of System
EHV or Extra High Voltage	Voltages of 88 kV and above
ESI Act	<i>Electricity Supply Industry Act 1995</i>
ESISC	Electrical Safety Inspection Service Charge
GW	GigaWatt
GWh	GigaWatt Hour
HV or High Voltage	Voltages between 6.6 kV and 66 kV
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
kV	KiloVolt
kVA	KiloVolt Amp
kW	KiloWatt
kWh	KiloWatt Hour
LV or Low Voltage	Voltages of 415 Volts or less
LRMC	Long Run Marginal Cost
MAR	Maximum Allowable Revenue
MD	Maximum Demand
MV	MegaVolt
MVA	MegaVolt Amps
MW	MegaWatt
MWh	MegaWatt Hour
NECF	National Energy Customer Framework
NEL	National Electricity Law

Term	Definition
NEM	National Electricity Market
NEMC	National Energy Market Charge
NUoS	The tariff for use of the distribution and transmission networks. It is the sum of both Distribution Use of System and Transmission Use of System Charges.
NPV	Net Present Value
OH	Overhead
Ombudsman Act	<i>Energy Ombudsman Act 1998</i>
OTTER	Office of the Tasmanian Economic Regulator
PAYG	The Pay As You Go package offered to electricity customers
Payguard	The credit management facility provided by Aurora as a component of PAYG
private residential dwelling	A house, flat, home unit, town house or similar qualifying residential premise
PTRM	Post Tax Revenue Model
RAB	Regulated Asset Base
Regulator	The meaning given in the <i>Economic Regulator Act 2009</i>
Residential transitional feed-in tariff rate	The rate prescribed in section 44F of the ESI Act for residential customers
Rules	National Electricity Rules
TasNetworks	Tasmanian Networks Pty Ltd
Standard feed-in tariff rate	The rate determined by the Regualtor iin accordance with section 44G of the ESI Act
TEC	Tasmanian Electricity Code
TNSP	Transmission Network Service Provider
ToU	Time of Use
Transend	Transend Networks Pty Ltd
TUoS	Transmission Use of System
UMS	Unmetered Supply
VT	Voltage Transformer
WACC	Weighted Average Cost of Capital