

## Meeting customer needs at the lowest sustainable cost



**Aurora Energy**  
**Pricing Proposal**  
**1 July 2014 – 30 June 2015**  
**April 2014**

Aurora Energy Pty Ltd  
ABN 85 082 464 622  
Level 2 / 21 Kirksway Place  
Hobart TAS 7000  
[www.auroraenergy.com.au](http://www.auroraenergy.com.au)

Enquiries regarding this pricing proposal should be addressed to:

Revenue and Pricing Manager

Distribution Business

Aurora Energy Pty Ltd

GPO Box 191

Hobart TAS 7001

e-mail: [networktariff@auroraenergy.com.au](mailto:networktariff@auroraenergy.com.au)

Copyright

© Aurora Energy Pty Ltd

## Table of Contents

1.	Preface .....	1
2.	Introduction .....	2
2.1.	Scope .....	2
2.2.	Structure .....	2
2.3.	Purpose .....	3
2.4.	Historical pricing documentation .....	3
2.5.	Relationship between this Annual Pricing Proposal and other network pricing documents .....	3
2.5.1.	Network Tariff Application and Price Guide .....	4
2.5.2.	Metering Services Application and Price Guide .....	4
2.5.3.	Public Lighting Tariff Application and Price Guide .....	4
2.5.4.	Fee-based Services Application and Price Guide .....	4
2.5.5.	Quoted Services Application and Price Guide .....	4
2.6.	Further information .....	5
2.7.	Overview of compliance obligations .....	5
3.	Business characteristics .....	11
4.	Pricing framework .....	12
4.1.	Pricing principles and objectives .....	12
4.2.	Setting the 2014-15 network tariffs .....	13
4.2.1.	Maximum allowable revenue and revenue cap .....	13
4.2.2.	Tariff development .....	14
4.2.3.	Energy consumption, demand and customer forecasts .....	16
4.2.4.	Effects of decreasing consumption on network tariffs .....	17
5.	Assignment of customers and tariffs .....	18
5.1.	Assignment of existing customers to tariff classes .....	18
5.2.	Assignment of new customers to a tariff class .....	18
5.3.	Reassignment of existing customers to another tariff class .....	18
5.4.	Objections to proposed assignments and reassignments .....	18
5.5.	System of assessment and review of the basis on which a customer is charged .....	19
5.6.	Assignment process .....	20
6.	Tariff classes – standard control services .....	21
6.1.	Overview .....	21
6.2.	Changes to tariff codes .....	25
6.2.1.	New tariff codes .....	25
6.2.2.	Changes to tariff codes .....	26
6.3.	Charging parameters for standard control services .....	27
6.3.1.	Recovery of DUoS .....	27
6.3.2.	Recovery of TUoS .....	29
6.4.	Tariffs .....	30

7.	Tariff classes – alternative control services .....	37
7.1.	Overview .....	37
7.2.	Metering services.....	37
7.2.1.	Overview.....	38
7.2.2.	Setting the 2014-15 metering services tariffs.....	39
7.2.3.	Prices for metering services.....	39
7.3.	Public lighting services .....	40
7.3.1.	Overview.....	40
7.3.2.	Setting the 2014-15 public lighting services tariffs.....	43
7.3.3.	Prices for public lighting services.....	44
7.4.	Fee-based services .....	45
7.4.1.	Overview.....	45
7.4.2.	Setting the 2014-15 fee-based services tariffs .....	50
7.4.3.	Prices for fee-based services .....	51
7.5.	Quoted services .....	52
7.5.1.	Overview.....	52
7.5.2.	Setting the 2014-15 quoted services tariffs.....	53
7.5.3.	Labour prices for quoted services.....	54
8.	Proposed tariff variations.....	55
8.1.	Adjustments to tariffs within a regulatory year .....	55
8.1.1.	Standard control services .....	55
8.1.2.	Alternative control services .....	55
8.2.	Variations between the regulatory years 2013-14 and 2014-15 .....	55
8.2.1.	Standard control services .....	55
8.2.2.	Alternative control services .....	56
8.3.	Change to certain tariffs .....	57
8.3.1.	Standard control services .....	57
8.3.2.	Alternative control services .....	57
9.	Transmission cost recovery .....	58
9.1.	TUoS Expenses .....	58
9.1.1.	Transmission charges.....	58
9.1.2.	Standard transmission charges.....	58
9.1.3.	Avoided TUoS .....	58
9.2.	TUoS Receipts .....	59
9.2.1.	Tariff recovery of TUoS.....	59
9.3.	TUoS unders and overs account .....	59
10.	Compliance with regulatory requirements .....	60
10.1.	DUOS unders and overs account .....	60
10.2.	Compliance with avoidable and stand-alone cost requirements .....	60
10.2.1.	Stand-alone costs .....	61
10.2.2.	Avoidable cost .....	61
10.2.3.	Process for determining stand-alone and avoidable cost.....	61
10.2.4.	Comparison of avoidable costs, expected revenue and stand-alone costs .....	62
10.3.	Long run marginal cost.....	65

---

10.4.	Transaction costs .....	65
10.5.	Response to price signals.....	65
10.6.	Tariff adjustment to address revenue shortfalls .....	66
10.7.	Compliance with side constraints.....	66
11.	Customer price impacts .....	68
11.1.	Expected price trends (2012 – 2017).....	68
11.1.1.	Standard control services.....	68
11.1.2.	Alternative control services.....	72
12.	Tariff development .....	77
12.1.	Future tariff changes .....	77
12.1.1.	Standard control services.....	77
12.1.2.	Alternative control services.....	77
13.	Audit certification .....	78
14.	Confidential information.....	79
15.	Attachments.....	80
16.	Listing of figures and tables .....	81
16.1.	Figures within this Annual Pricing Proposal .....	81
16.2.	Tables within this Annual Pricing Proposal.....	81
17.	Glossary of terms/abbreviations.....	83



## 1. Preface

Section 6.18.2 of the National Electricity Rules (Rules) requires that Aurora Energy Pty Ltd (Aurora) submit to the Australian Energy Regulator (AER), at least 2 months before the commencement of each regulatory year of the regulatory control period, a pricing proposal (an Annual Pricing Proposal) for the regulatory year.

This document is Aurora's Annual Pricing Proposal for the regulatory year commencing 1 July 2014 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 Aurora within this Annual Pricing Proposal, unless otherwise stated, are to Aurora in its capacity as a licensed Distribution Network Service Provider in the Tasmanian jurisdiction only.

From 1 July 2014 Aurora's distribution business will merge with Transend Networks Pty Ltd (the jurisdictional Transmission Network Service Provider) to form Tasmanian Networks Pty Ltd (TasNetworks). As a consequence TasNetworks will become the Distribution Network Service Provider responsible for the implementation and administration of this Annual Pricing Proposal within the Tasmanian jurisdiction.

## 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 2014-15 regulatory year.

Network tariffs are based on the recovery of the maximum allowable revenue as determined by the AER in its distribution determination for the 2012-17 regulatory control period.

Alternative control services are based on the price caps as determined by the AER in its distribution determination for the 2012-17 regulatory control period.

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

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

### 2.2. Structure

Aurora's 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 Aurora distribution business.
4	Pricing framework	Outlines the pricing principles and objectives in setting tariffs and provides 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 charging parameters which are related to each service.
8	Proposed tariff variations	Outlines the proposed variations to tariffs between the 2013-14 and 2014-15 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.
10	Compliance with regulatory requirements	Details how the methodology used complies with the requirements under the Rules and also under the requirements of the AER distribution determination.



Section	Title	Purpose
11	Customer price impacts	Provides a discussion on the customer impacts as a result of the proposed tariffs for the 2014-15 regulatory year.
12	Tariff development	Outlines tariff development in the medium term, including additional tariffs, structural changes or removal of tariffs proposed over the 2012-17 regulatory control period.
13	Audit certification	Details the audit certification for the calculation of standard control services.
14	Confidential information	Details which parts of the Annual Pricing Proposal are confidential and provides reasons in support of a confidentiality claim.
15	Attachments	Provides a listing of all attachments included with this Annual Pricing Proposal.
16	Listing of figures and tables	Provides a listing of the Figures and Tables within the 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 to fulfil the dual roles of compliance with the Rules and the AER's distribution determination; and to provide customers connected to the Aurora distribution network with the methodology and principles which have been followed in proposing Aurora's standard control services tariffs and alternative control services prices for the 2014-15 regulatory year.

### 2.4. Historical pricing documentation

In the 2008–12 regulatory period, Aurora was required by the Office of the Tasmanian Economic Regulator (OTTER) to prepare an Initial Network Tariff Strategy covering the period 1 January 2008 – 30 June 2008 and a Final Network Tariff Strategy covering the period 1 July 2008 – 30 June 2012. Section 6.18 of the Rules does not require Aurora to publish a tariff strategy document, and as a result Aurora no longer publishes this document. Aurora will however 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.

Aurora will also continue to publish Application and Price Guides for the provision of its distribution services. An overview of these documents is set out in the sections below.

### 2.5. Relationship between this Annual Pricing Proposal and other network pricing documents

This Annual Pricing Proposal is supported by the following documents. These documents will be used by Aurora to assist external parties in understanding the development and application of its network tariffs and alternative control services prices. The suite of documentation comprises a:

- 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 are appended as an attachment to this Annual Pricing Proposal.

### **2.5.1. Network Tariff Application and Price Guide**

Aurora's Network Tariff Application and Price Guide provides details on the assignment of customers to network tariffs, a description of the network tariffs, the terms and conditions surrounding 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 individual circumstances of the customer and the requirements for the application of that chosen network tariff.

This Guide also includes the applicable rates for each of the components of the network tariff that are available to Aurora's customers.

### **2.5.2. Metering Services Application and Price Guide**

Aurora's Metering Services Application and Price Guide provides details on the assignment of metering charges to network tariffs, a description of the metering tariffs, the terms and conditions surrounding those metering 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 for an individual circumstance and the requirements for the application of a chosen network tariff.

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

### **2.5.3. Public Lighting Tariff Application and Price Guide**

Aurora's Public Lighting Tariff Application and Price Guide provides a description of the public lighting services that Aurora provides, the terms and conditions surrounding those services and the charging components of 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 applicable rates for each of the public and contract lighting services that Aurora will provide.

### **2.5.4. Fee-based Services Application and Price Guide**

Aurora's Fee-based Services Application and Price Guide provides a description of the fee-based services that Aurora 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 Aurora.

This Guide also includes the applicable rates for each of the fee-based services that Aurora will provide.

### **2.5.5. Quoted Services Application and Price Guide**

Aurora's Quoted Services Application and Price Guide provides a description of the quoted services that Aurora provides, and the terms and conditions surrounding those quoted services. It is a guide for customers seeking to understand the fees that will be charged to individual customers for the provision of other services by Aurora.

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

## 2.6. Further information

The documents discussed above will be available on the Aurora web site at:

<http://www.auroraenergy.com.au/electricity-network/network-tariffs>.

Customers and retailers who are uncertain about the network pricing process or their particular circumstances are encouraged to contact Aurora at:

Revenue and Pricing Manager

Distribution Business

Aurora Energy Pty Ltd

GPO Box 191

Hobart TAS 7001

Phone 1300 132007

E-mail: [networktariff@auroraenergy.com.au](mailto:networktariff@auroraenergy.com.au)

## 2.7. 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. Aurora's compliance with these requirements is set out in Table 2.

**Table 2: Compliance obligations under the Rules**

Clause	Pricing Proposal Requirement	Reference
6.18.2(a)(2)	A Distribution Network Service Provider must submit to the AER, at least 2 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

Clause	Pricing Proposal Requirement	Reference
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 Aurora.
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 Aurora.
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
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 2 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

Clause	Pricing Proposal Requirement	Reference
6.18.4(a)(1)	<p>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:</p> <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)	<p>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.</p>	section 5
6.18.4(a)(3)	<p>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.</p>	section 5.2
6.18.4(a)(4)	<p>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 Distribution Network Service Provider's decision to assign a customer to a particular tariff class, or to re-assign a customer from one tariff class to another should be subject to an effective system of assessment and review.</p>	section 5
6.18.4(b)	<p>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.</p>	section 5

Clause	Pricing Proposal Requirement	Reference
6.18.5(a)	For each tariff class, the revenue expected to be recovered should lie on or between: <ol 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> </ol>	section 10
6.18.5(b)(1)	A tariff, and if it consists of 2 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)(i)	A tariff, and if it consists of 2 or more charging parameters, each charging parameter for a tariff class must be determined having regard to transaction costs associated with the tariff or each charging parameter.	section 10
6.18.5(b)(2)(ii)	A tariff, and if it consists of 2 or more charging parameters, each charging parameter for a tariff class must be determined having regard to whether retail customers of the relevant tariff class are able or likely to respond to price signals.	section 10
6.18.5(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.	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: <ol style="list-style-type: none"> <li>(1) the CPI-X limitation on any increase in the Distribution Network Service Provider's expected weighted average revenue between the two regulatory years plus 2%.</li> <li>(2) CPI plus 2%.</li> </ol>	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 Distribution Network Service Provider 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 Distribution Network Service Provider is able to recover from retail customers no more and no less than the designated pricing proposal charges it incurs; and</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

Clause	Pricing Proposal Requirement	Reference
6.18.7(d)	Notwithstanding anything else in this clause 6.18.7, a Distribution Network Service Provider may not recover charges under this clause to the extent these are: <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
6.18.7A(a)	A pricing proposal must provide for tariffs designed to pass on to customers a Distribution Network Service Provider's jurisdictional scheme amounts for approved jurisdictional schemes.	There are no jurisdictional schemes applicable to Aurora.
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 Distribution Network Service Provider's approved jurisdictional schemes adjusted for over or under recovery in accordance with paragraph (c).	There are no jurisdictional schemes applicable to Aurora.
6.18.7A(c)	The over and under recovery amount must be calculated in a way that: <ol style="list-style-type: none"> <li>(1) subject to subparagraphs (2) and (3) below, is consistent with the method determined by the AER for jurisdictional scheme amounts in the relevant distribution determination for the Distribution Network Service Provider, or where no such method has been determined, with the method determined by the AER in the relevant distribution determination in respect of designated pricing proposal charges;</li> <li>(2) ensures a Distribution Network Service Provider is able to recover from customers no more and no less than the jurisdictional scheme amounts it incurs; and</li> <li>(3) adjusts for an appropriate cost of capital that is consistent with the rate of return used in the relevant distribution determination for the relevant regulatory year.</li> </ol>	There are no jurisdictional schemes applicable to Aurora.



### 3. Business characteristics

Aurora is a Tasmanian Government owned fully integrated energy and network business, with complementary activities in telecommunications and energy related technologies. It was formed in July 1998 after the disaggregation of the former Hydro Electric Commission.

Aurora's distribution business provides a 24-hour, seven day a week service to approximately 234,000 residential and 47,800 commercial distribution customers across the State, to ensure a safe and reliable electricity supply. Aurora's core distribution assets comprise approximately 15,000 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, 32,000 ground and pole mounted substations and 222,000 poles across an area of 67,800 square kilometres. Aurora also operates approximately 50,000 public lights and maintains them on behalf of local councils.

Consistent with its strategic focus, Aurora remains committed to demonstrating industry leadership by continuing to deliver a safe and reliable electricity supply while minimising the impact on Tasmanian households and businesses of any future distribution-related price increases.

Aurora will however undergo significant structural reform on 1 July 2014 as the Tasmanian Government implements reforms to the Tasmanian Electricity Supply Industry<sup>1</sup>. This reform will result in the merger of the Aurora distribution business and the Transend transmission business into a single network business (TasNetworks). As a consequence of this reform, TasNetworks will implement and administer the network tariffs and alternative control services prices for the 2014-15 regulatory year.

---

<sup>1</sup> Refer to the Department of Treasury and Finance Electricity Reform section at <http://www.treasury.tas.gov.au>.

## 4. Pricing framework

### 4.1. Pricing principles and objectives

Aurora's 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.

Aurora's 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 sets out the principles that Aurora 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.

Aurora has maintained the pricing principles it established as a component of the 2008-12 regulatory period. Aurora considers that these principles ensure compliance with the Rules requirements and also provide clarity in the formulation of robust network tariffs.

Aurora's 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:

- (1) by being subsidy free (greater than incremental costs and less than stand alone costs);
  - (2) by having regard to the level of available capacity;
  - (3) by signalling the impact of additional usage on future investment costs; and
  - (4) (if tariffs based on above factors under-recovers the allowed revenue) by making up any shortfall in revenue in a manner that minimises the effect on consumption and investment decisions.
- (e) To the extent practicable, Aurora should 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, Aurora 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 2014-15 network tariffs

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

### 4.2.1. Maximum allowable revenue and revenue cap

The 2014-15 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 plus any AER approved adjustments from prior periods (the Revenue Cap).

Aurora's MAR is calculated in accordance with the formula given by the AER in its distribution determination and requires:

$$MAR_t = AR_t \pm \text{passthrough}_t \pm ESISC_t \pm NEMC_t \pm \text{transitional}_t$$

Table 3 provides details of the Revenue Cap calculation that Aurora has utilised in the preparation of its network tariffs.

**Table 3: Revenue cap**

Component	Amount (\$m)	Comment
AR	284.642	As given in the AER's distribution determination
± passthrough	0.000	AER approved pass throughs
± ESISC	0.100	Adjustments for differences in the electrical safety levy
± NEMC	0.120	Adjustments for differences in the national energy market levy
<b>MAR</b>	<b>284.866</b>	<b>Expected revenue including all adjustments</b>
Adjustments		
± Unders/Overs	15.593	Adjustment for under/over recovery of revenue in prior periods
<b>Revenue Cap</b>	<b>300.459</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. Aurora allocates costs to customer classes using its distribution cost of supply (DCoS) model.

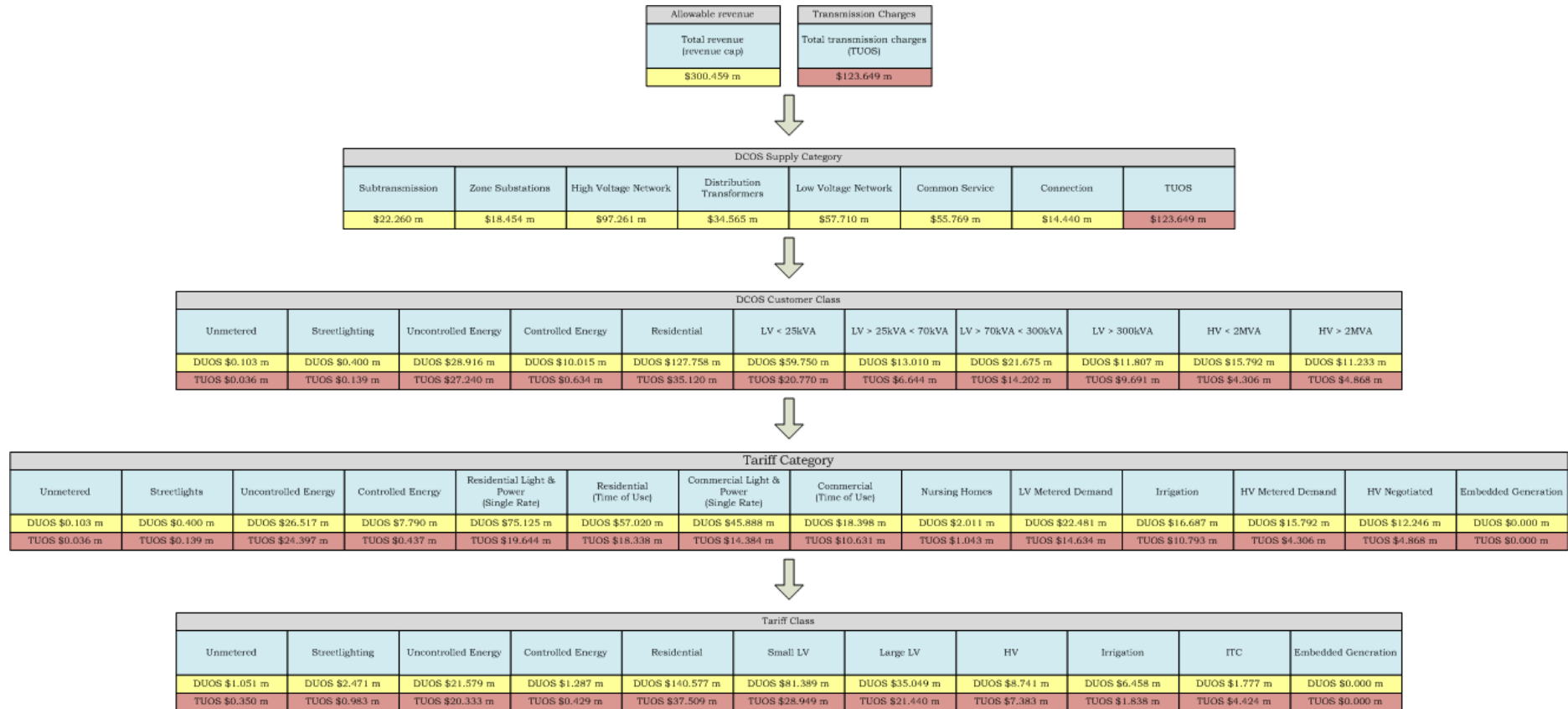
This modelling process is explained in the paper 'DCoS Methodology' appended as an attachment to this Annual Pricing Proposal.

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 the customer classes within the DCoS model.

This modelling process is explained in the paper 'DCoS to Tariff Methodology' appended as an attachment to this Annual Pricing Proposal.

The outputs of these modelling outcomes are demonstrated in Figure 1.

Figure 1: Tariff development



Note: figures may not add due to rounding

### **4.2.3. Energy consumption, demand and customer forecasts**

Aurora has prepared forecasts for demand, energy and customers as a component of its network tariff development modelling.

#### **4.2.3.1. Energy consumption**

Over the past five years energy consumption in Tasmania has been on a continual and gradual decline. In past periods, Aurora has relied upon traditional multiple regression models which utilised a set of drivers for each customer class to produce energy consumption forecasts. These drivers included economic growth (GSP), population growth, weather variation, customer prices and price elasticity of demand measures.

Aurora considers that these multiple regression models have not produced forecasts that are reflective of current declining energy consumption trends. Historically, there has been an over-estimation of forecast consumption which has led to under-recoveries and higher than forecast price rises in following years. Since 2009-10, total average consumption has fallen by approximately 86 GWh each year.

As a result Aurora has reviewed its approach to energy consumption forecasting and prepared a forecast which is more reflective of the declining trends taking into account consumption profiles experienced by Aurora in recent years. Aurora continues to utilise the drivers previously relied upon, however has overlaid these with current trends within each customer class.

The 2014-15 energy consumption forecasts therefore reflect the continued decline in energy consumption (primarily residential) experienced during the 2013-14 financial year. This continued declining consumption is most likely due to the continued milder weather patterns over recent years impacting on heating and cooling loads of customers, changes in customer behaviour resulting from the increasing cost of electricity and the exponential increase in the installation of solar embedded generation.

The 2014-15 energy consumption forecast is for a total consumption of 4,167.3 GWh. This forecast is 0.85 per cent lower than Aurora's forecast for its 2013-14 pricing proposal.

#### **4.2.3.2. Demand**

The demand forecasts prepared by Aurora as a component of its annual planning report will not reconcile with those used by Aurora in the development of its network tariffs. This difference is attributable to the use of coincident maximum demand (system maximum demand) within the annual planning report and any-time maximum demand (ATMD) in the setting of network tariffs. 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.

Aurora has also assumed that the largest customers that are required to set a specified demand will set that specified demand such that they will minimise excess demand charges.

#### **4.2.3.3. Customers**

Customer numbers forecasts have been developed for this Annual Pricing Proposal based upon the number of customers that are forecast to use each individual tariff. As Aurora's customers may have multiple tariffs, the number of 'customers' will be greater than the customers that are connected to the Aurora distribution network.

#### **4.2.4. Effects of decreasing consumption on network tariffs**

The large price increases experienced by customers during the previous regulatory period and milder than anticipated weather patterns has resulted in a reduction in energy consumption for a number of Aurora's customers. This reduction in energy consumption has meant that Aurora has not fully recovered its allowable revenue for the 2012-13 and 2013-14 regulatory years.

Aurora has under recovered its allowable for 2012-13 and anticipates that it will under recover its 2013-14 allowable revenue. Over the two year period the under recovery amounts to \$15.593m (DUoS only). This under recovery adjustment has been included as a component of Aurora's Revenue Cap allowance for the 2014-15 regulatory year.

Given the low consumption again experienced during the 2013-14 year, Aurora has also been conservative with its energy and customer forecasts for the 2014-15 year. These forecasts reflect the softening market seen in recent periods.

These continued lower consumptions will again place upward pressure on Aurora's network tariffs as Aurora attempts to design a suite of tariffs that will recover the Revenue Cap.

## 5. Assignment of customers and tariffs

The AER's distribution determination sets out the principles Aurora is to adhere to in assigning customers to tariff classes and applies to all direct control services.

### 5.1. Assignment of existing customers to tariff classes

Aurora's customers will be taken to be assigned to the tariff class which Aurora was charging that customer immediately prior to 1 July 2014 if:

- they were an Aurora customer prior to 1 July 2014; and
- continue to be a customer of Aurora as at 1 July 2014.

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

If Aurora becomes aware that a person will become a customer of Aurora, then Aurora 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, Aurora 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>2</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, Aurora, when assigning a customer to a tariff class, will ensure:

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

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

Aurora may reassign a customer to another tariff class if the existing customer's load characteristics or connection characteristics (or both) have changed such that it is no longer appropriate for that customer to be assigned to the tariff class to which the customer is currently assigned. Should a customer no longer have the same or materially similar load or connection characteristics as other customers on the customer's existing tariff class, then Aurora may reassign that customer to another tariff class.

### 5.4. Objections to proposed assignments and reassignments

Aurora will notify a customer in writing of the tariff class to which the customer has been assigned or reassigned, prior to the assignment or reassignment occurring.

Any notice will include advice informing the customer that they may request further information from Aurora and that the customer may object to the proposed assignment or reassignment.

---

<sup>2</sup> The AER interprets 'nature' to include the installation of any technology capable of supporting time based tariffs.



This notice will include:

- a copy of Aurora's internal procedures for reviewing objections and the link to where such information is available on Aurora's website;
- that if the objection is not resolved to the satisfaction of the customer then the customer is entitled to escalate the matter to the Energy Ombudsman Tasmania; and
- that if the objection is not resolved to the satisfaction of the customer after escalation to the Energy Ombudsman Tasmania, then the customer is entitled to seek a decision of the AER via the dispute resolution process available under Part 10 of the NEL.

If Aurora receives a request for further information from a customer, then it will provide such information. If any of the information requested by the customer is considered confidential by Aurora, it may not provide that information to the customer.

If a customer makes an objection to Aurora about the proposed assignment or reassignment, Aurora will reconsider the proposed assignment or reassignment. Aurora will take into consideration the factors 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, Aurora's 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. Aurora 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.

Aurora reviews the assignment of customers to its tariff classes as part of the annual process of developing its tariffs for AER approval. Aurora 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 customer's usage or load profile.

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

Aurora confirms that the charging parameters within its 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.

Aurora therefore considers it has an effective system for assessing and reviewing the basis on which a customer is charged.

## **5.6. Assignment process**

The assignment processes adopted by Aurora 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 Aurora's website at:

<http://www.auroraenergy.com.au/electricity-network/network-tariffs>.

## 6. Tariff classes – standard control services

### 6.1. Overview

Aurora 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 transaction costs.

The individual, demand and general tariff conditions outlined in this section have, in general, remained unchanged from those of the previous regulatory control period. Certain network tariffs have however been abolished for the 2014-15 regulatory year.

The tariff classes for standard control services are shown in Table 4.

**Table 4: 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 Aurora 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 Aurora 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 Aurora 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 Aurora distribution network with this network tariff is not eligible for any other network tariff.

Tariff class	Tariff	Description
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.
	LV Day/Night Irrigation (TAS73)	This low voltage peak/off-peak 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. <i>This network tariff is obsolete, with no new connections allowed.</i> <i>This network tariff will be abolished in the 2014-15 regulatory year.</i>
Large LV	Business LV kVA Demand (TAS82)	This network tariff is for installations 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 retail <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>

Tariff class	Tariff	Description
	Residential LV PAYG TOU (TAS92)	This time of use network tariff supports the retail <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.
Uncontrolled Energy	Uncontrolled LV Heating (TAS41)	This network tariff is for low voltage installations. In installations that are private residential dwellings, this network tariff: <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> In installations that are not private residential dwellings, this network tariff: <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)	This off-peak network tariff is for low voltage installations and includes an ‘afternoon boost’ component. In installations that are private residential dwellings, this network tariff: <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 Aurora; 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> In installations that are not private residential dwellings, this network tariff: <ul style="list-style-type: none"> <li>is for water heating and/or space heating and/or other “wired in” appliances as approved by Aurora.</li> </ul>
	Controlled LV Energy – Night period only (TAS63)	This network tariff is for low voltage installations and is only available during off-peak periods. In installations that are private residential dwellings, this network tariff: <ul style="list-style-type: none"> <li>is for water heating and/or residential space heating and/or other circuits as approved by Aurora; 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> In installations that are not private residential dwellings, this network tariff: <ul style="list-style-type: none"> <li>is for water heating and/or space heating and/or other circuits as approved by Aurora.</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 public lighting service provided by Aurora.</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 transitional feed-in tariff rate.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, Aurora 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 transitional feed-in tariff rate.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, Aurora 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 fair and reasonable tariff rate.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, Aurora 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)	<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 fair and reasonable feed-in tariff rate.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, Aurora does not apply a charge for this network tariff.</p> <p>Connection charges for embedded generation will always be treated on an individually calculated basis. Terms and conditions for these customers are contained within individually negotiated connection agreements.</p>
	Non-Qualifying Import (TASX6I)	<p>This network tariff is 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.</p> <p>Consistent with the provisions of clause 6.1.4 of the Rules, Aurora 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>

## 6.2. Changes to tariff codes

### 6.2.1. New tariff codes

The Tasmanian Government announced reforms to the Tasmanian Electricity Supply Industry that include opening the Tasmanian retail electricity market to full retail competition (FRC) from 1 July 2014.

With the commencement of FRC and the potential entry of new retailers from 1 July 2014, the Tasmanian Government has elected to put in place new feed-in tariff arrangements to ensure that existing and new retail customers who export electricity into the distribution network will receive a fair and reasonable rate for this exported energy. These arrangements will exist for the period from 1 January 2014 to 31 December 2018. These transition arrangements are as follows:

- Feed-in tariff arrangements under Aurora Retail's Net Metering Buyback Scheme were closed to new customers on 31 August 2013.
- All customers with existing arrangements at this date will continue to receive their current feed-in tariff (the 'transitional feed-in tariff') until 31 December 2018.
- Customer that made application for connection of an embedded generation system prior to 31 August 2013 would have their embedded generation system approved by Aurora as an eligible embedded generation system.
- Customers that install an eligible embedded generation system from 31 August 2013 will be entitled to a transitional feed-in tariff until 31 December 2018.
- From 1 January 2014, the Tasmanian Economic Regulator will be required to determine a new fair and reasonable 'standard' feed-in tariff.
- Aurora is required to reimburse electricity retailers for the difference between the transitional and standard feed-in tariff rates.

- Transitional feed-in tariff rates and terms are different for residential and small business customers.

Until the Tasmanian Government announcement, Aurora had a single embedded generation network tariff (e.g. tariff N21). As a consequence, the former network tariff has been split to differentiate between the tariff received by residential and small business customers, creating two new network tariff codes, namely TASX1I and TASX2I. The two new network tariff codes will record the quantity of energy imported into the distribution network. Import network tariffs represent the price at which Aurora will credit retailers for their customers who have embedded generation facilities and are eligible under the Tasmanian Government feed-in arrangements.

For those customers connecting a non-eligible embedded generation facility after 31 August 2013, three new network tariffs have been created, namely TAS4XI (residential standard feed-in), TASX5I (business standard feed-in) and TASX6I (business non-qualifying import).

### 6.2.2. Changes to tariff codes

The introduction of FRC from 1 July 2014 has resulted in significant changes to the Aurora systems that support market operations. These changes have allowed Aurora to implement network tariff codes that will be consistent across all systems and with market rules.

Changes to Aurora’s network tariff codes have not changed the fundamental structures or conditions of Aurora’s network tariffs and are for ease of identification only.

The relationship between Aurora’s 2013-13 network tariff codes and those applicable from the 2014-15 regulatory year are shown in Table 5.

**Table 5: Network tariff codes**

Tariff class	Tariff	2013-14 Tariff code	2014-15 Tariff code
ITC	Individual Tariff Calculation	ITC	TASCUS1
			TASCUS2
			TASCUS3
			TASCUS4
HV	Business HV kVA Specified Demand	N10s	TASDM
	Business HV kVA Specified Demand >2MVA	N15	TAS15
Irrigation	Irrigation LV TOU	N08a	TAS75
	LV Day/Night Irrigation	N08	TAS73
Large LV	Business LV kVA Demand	N09	TAS82
Small LV	Business LV General	N02	TAS22
	Business LV Nursing Homes	N02a	TAS34
	General Network – Business, Curtilage	N02b	TASCURT
	Business LV ToU	N13b	TAS94
Residential	Residential LV General	N01	TAS31
	Residential LV PAYG	N13	TAS101



Tariff class	Tariff	2013-14 Tariff code	2014-15 Tariff code
	Residential LV PAYG TOU	N13r	TAS92
	Residential LV ToU	N13r	TAS93
Uncontrolled Energy	Uncontrolled LV Heating	N05	TAS41
Controlled Energy	Controlled LV Energy – Off Peak with afternoon boost	N06	TAS61
	Controlled LV Energy – Night period only	N06a	TAS63
Unmetered	UMS LV General	N07	TASUMS
Streetlights	UMS LV Public Lighting	N20	TASUMSSL
Embedded Generator	Residential LV Import Transitional	N21	TASX11
	Business LV Import Transitional		TASX2I
	Residential LV Import Fair and Reasonable		TASX4I
	Business LV Import Fair and Reasonable		TASX5I
	Non-Qualifying Import		TASX6I

### 6.3. Charging parameters for standard control services

Aurora has structured the charging parameters within its network tariffs to signal the impact that customers will have on the distribution network, manage demand and volume variance risk, and avoid sending signals that could result in inefficient choices being made by customers of that tariff class. In this context:

- Aurora's 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 customers about the cost of their connection works and sets a constant and foreseeable price for those customers that assist them in making a decision to connect with full visibility of the costs. The fixed charges also provide Aurora with a fixed revenue source by which it can recover its costs and therefore ensure that upstream investment decisions can be made with clarity.
- Aurora's volume charges are designed to recover the costs of the shared network on a basis which reflects the characteristics of the network user.
- Aurora's 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.

#### 6.3.1. Recovery of DUoS

Network tariffs and charging parameters are designed to recover the approved revenue which is consistent with the calculation of the Revenue Cap. The network charging parameters adopted by Aurora for the recovery of standard control services DUoS tariffs are detailed in Table 6.

**Table 6: 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	✓	✓		
	TAS73	✓	✓		
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>	TASX11				
	TASX21				
	TASX41				
	TASX51				
	TASX61				

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.

### 6.3.2. Recovery of TUoS

Electricity is received within the Aurora distribution network primarily from the Transend transmission network. Transend charges TUoS for the provision of this service and Aurora recovers these costs as a component of the application of its network tariffs.

Aurora's transmission cost recovery tariffs are based on forecast TUoS charges that are provided by Transend and adjusted for under or over recoveries as outlined in the AER's distribution determination. The TUoS charges from Transend comprise both fixed and variable charges. There are in excess of 40 transmission connection points within Tasmania and it is not administratively efficient to pass the Transend locational pricing signals to all customers. Aurora is also required to provide all low voltage customers in Tasmania with a 'postage stamp' price, irrespective of their ultimate transmission connection point. Aurora will therefore only preserve the pricing signals within the Transend charges for the largest customers that are connected to Aurora's distribution network. These largest customers are generally covered by the ITC and TAS15 network tariffs.

The network charging parameters adopted by Aurora for the recovery of standard control services TUoS tariffs are detailed in Table 7.

**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		✓		
	TAS73		✓		
Large LV	TAS82		✓	✓	
Small LV	TAS22		✓		
	TAS34		✓		
	TASCURT		✓		
	TAS94		✓		
Residential	TAS31		✓		
	TAS92		✓		
	TAS101		✓		
	TAS93		✓		
Uncontrolled Energy	TAS41		✓		
Controlled Energy	TAS61		✓		

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)
	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.

## 6.4. Tariffs

The proposed DUoS charges for each of Aurora’s 2014-15 network tariffs are outlined in Table 8.

The proposed DUoS charges for each of Aurora’s 2014-15 ITC<sup>3</sup> and TAS15 network tariffs are outlined in Table 9.

The proposed TUoS charges for each of Aurora’s 2014-15 network tariffs are outlined in Table 10.

The proposed locational TUoS charges that are applicable to Aurora’s 2014-15 ITC and TAS15 tariffs are outlined in Table 11.

<sup>3</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	41.820					11.699			
TAS22	Business LV General	41.820					11.699			
TAS34	Business LV Nursing Homes	41.820				11.699	5.152			
TASCURT	General Network – Business, Curtilage	25.092					11.699			
TAS41	Uncontrolled LV Heating	4.528					2.252			
TAS61	Controlled LV Energy – Off Peak with afternoon boost	8.489					0.911			
TAS63	Controlled LV Energy – with Night period only	8.489					0.817			
TASUMS	UMS LV General	41.820					12.748			
TAS75	Irrigation LV TOU	200.964	11.126	6.625	0.817					
TAS73	LV Day/Night Irrigation	200.964		6.625	0.817					
TAS82	Business LV kVA Demand	204.090					2.159	30.804		
TASSDM	Business HV kVA Specified Demand	142.805	0.227	0.183	0.061				21.842	218.420
TAS101	Residential LV PAYG	41.820					5.662			
TAS92	Residential LV PAYG TOU	41.820	9.419	5.831	0.821					
TAS94	Business LV ToU	42.677	10.386	6.568	0.817					
TAS93	Residential LV ToU	41.820	9.419	5.831	0.821					
TASUMSSL	UMS LV Public Lighting							0.103		
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>4</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)	1892.600	1.794	0.486	0.061		0.414	2.070	11.399	56.995
TASCUS1	Confidential									
TASCUS1	Confidential									
TASCUS1	Confidential									
TASCUS1	Confidential									
TASCUS1	Confidential									
TASCUS1	Confidential									

<sup>4</sup> 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						4.049			
TAS22	Business LV General						4.049			
TAS34	Business LV Nursing Homes					4.049	3.064			
TASCURT	General Network – Business, Curtilage						4.049			
TAS41	Uncontrolled LV Heating						2.492			
TAS61	Controlled LV Energy – Off Peak with afternoon boost						0.759			
TAS63	Controlled LV Energy – Night period only						0.679			
TASUMS	UMS LV General						5.275			
TAS75	Irrigation LV TOU		4.516	2.957	0.681					
TAS73	LV Day/Night Irrigation			2.957	0.681					
TAS82	Business LV kVA Demand						0.939	21.817		
TASSDM	Business HV kVA Specified Demand		1.397	1.037	0.642				1.649	16.490
TAS101	Residential LV PAYG						2.480			
TAS92	Residential LV PAYG TOU		4.251	2.629	0.714					
TAS94	Business LV TOU		4.251	2.854	0.729					
TAS93	Residential LV TOU		4.251	2.629	0.714					
TASUMSSL	UMS LV Public Lighting						0.041			
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.

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	
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



**Table 11:** Proposed tariffs for locational TUoS – standard control services

Transmission node identifier	Transmission node description	Daily charge c/kVA/day
TAL2	Arthurs Lake	19.379
TAV2	Avoca	26.214
TBU3	Burnie	20.711
TBW2	Bridgewater	22.070
TDB2	Derwent Bridge	347.199
TDE2	Derby	44.172
TDP2	Devonport	23.186
TEB2	Emu Bay	28.391
TEL2	Electrona	29.253
TKE2	Kermandie	45.268
TKI2	Kingston 11KV	27.911
TKI3	Kingston 33KV	25.391
TKR2	Knights Road	30.529
TMB2	Meadowbank	24.252
TNN2	New Norfolk	25.065
TNT2	Newton	47.156
TPL2	Port Latta	25.885
TPM3	Palmerston	25.227
TQT2	Queenstown	35.876
TRA2	Railton	23.116
TRB2	Rosebery	23.542
TSD2	Scottsdale	47.072
TSM2	St Marys	34.937
TSO2	Sorell	29.153
TSR2	Savage River	27.897
TST2	Smithton	31.357
TTB2	Triabunna	34.632
TTU2	Tungatinah	93.500
TUL2	Ulverstone	22.242
TWA2	Waddamana	41.288
TWV2	Wesley Vale	51.852
TVN1	Hobart Virtual	22.090
TVN2	Tamar Virtual	18.652

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 12:** 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 13:** 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

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 Aurora’s alternative control services are described in Table 14.

**Table 14:** 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 Aurora’s role as metering provider and meter data provider (MDP).</p>
Public lighting	<p>Public lighting services are those services provided by Aurora for:</p> <ul style="list-style-type: none"> <li>• the provision, maintenance and replacement of public lighting assets owned by Aurora;</li> <li>• the maintenance of public lighting assets owned by customers (contract lighting); and</li> <li>• the provision, maintenance and replacement of Aurora owned public lighting poles.</li> </ul>
Fee-based services	<p>Fee-based services are those services provided by Aurora 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 Aurora 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>

### 7.2. Metering services

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

### 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 Aurora’s 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 Aurora to read those meters and collect the meter data.

The AER has determined that the provision of metering services will be in accordance with the type of meter and the function that it provides and have classified these meters into differing meter classes. These meter classes are shown in Table 15.

**Table 15:** 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).

Meter Class	Definition
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 2014-15 metering services tariffs

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

The 2014-15 metering 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.

Aurora's price caps for the provision of metering services are calculated in accordance with the formula given by the AER in its distribution determination and requires:

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

Table 16 provides details of the price cap calculation that Aurora has utilised in the preparation of its metering services tariffs.

**Table 16: Price cap**

Component	Value	Comment
$P_{t-1}$	Various	The price for each metering service for the prior regulatory year (2013-14).
$\Delta CPI_t$	2.93%	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 given in the AER's distribution determination.

### 7.2.3. Prices for metering services

The proposed 2014-15 prices for each of Aurora's metering services tariffs are outlined in Table 17.

**Table 17: Proposed tariffs for metering services**

Tariff	Price (c/day)
Domestic LV – single phase	7.344
Domestic LV – multi phase	15.240
Domestic LV – CT meters	18.860
Domestic LV – single phase (remote read)	6.313
Domestic LV – multi phase (remote read)	14.275
Domestic LV – CT meters (remote read)	20.572
Business LV – single phase	7.596

Tariff	Price (c/day)
Business LV – multi phase	15.196
Business LV – CT meters	19.650
Business LV – single phase (remote read)	6.313
Business LV – multi phase (remote read)	14.275
Domestic LV – CT meters (remote read)	20.572
Other meters	13.411

### 7.3. Public lighting services

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

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 Aurora for:

- the provision, maintenance and replacement of public lighting assets owned by Aurora;
- the maintenance of public lighting assets owned by customers (contract lighting); and
- the provision, maintenance and replacement of Aurora 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 in accordance with the type of light that is provided and whether that light is owned by Aurora. The AER has also determined that Aurora 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 Aurora are referred to as public lights, while those lights that are owned by the customer and surcharge poles are referred to as contract lights.

These lighting types are shown in Table 18 and Table 19.

**Table 18:** Public lighting types for public lighting services

Lighting type	Definition
50W mercury vapour	The provision, maintenance and replacement of Aurora 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 Aurora 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 Aurora owned 80 watt mercury vapour decorative light fittings. <i>This lighting type is obsolete, with no new connections allowed.</i>
125W mercury vapour	The provision, maintenance and replacement of Aurora 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 Aurora 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 Aurora 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 Aurora owned 70 watt sodium vapour light fittings.
100W sodium vapour	The provision, maintenance and replacement of Aurora owned 100 watt sodium vapour light fittings.
150W sodium vapour	The provision, maintenance and replacement of Aurora owned 150 watt sodium vapour light fittings.
250W sodium vapour	The provision, maintenance and replacement of Aurora owned 250 watt sodium vapour light fittings.
400W sodium vapour	The provision, maintenance and replacement of Aurora owned 400 watt sodium vapour light fittings.
150W metal halide	The provision, maintenance and replacement of Aurora owned 150 watt metal halide light fittings.
250W metal halide	The provision, maintenance and replacement of Aurora owned 250 watt metal halide light fittings.
2 x 20W fluorescent	The provision, maintenance and replacement of Aurora owned 2 x 20 watt fluorescent light fittings. <i>This lighting type has been abolished and is no longer available to any customer, with no connections allowed on this lighting type after 1 July 2013.</i>

Lighting type	Definition
2 x 40W fluorescent	The provision, maintenance and replacement of Aurora 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 Aurora owned 42 watt compact fluorescent light fittings.
60W incandescent	The provision, maintenance and replacement of Aurora owned 60 watt incandescent light fittings. <i>This lighting type has been abolished and is no longer available to any customer.</i>

**Table 19:** 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.



Lighting type	Definition
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 Aurora owned public lighting poles. <i>This lighting type is obsolete, with no new connections allowed.</i>

### 7.3.2. Setting the 2014-15 public lighting services tariffs

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

The 2014-15 public lighting 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.

Aurora’s price caps for the provision of public lighting services are calculated in accordance with the formula given by the AER in its distribution determination and requires:

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

Table 20 provides details of the price cap calculation that Aurora has utilised in the preparation of its public lighting tariffs.

**Table 20: Price cap**

Component	Value	Comment
$P_{t-1}$	Various	The price for each public lighting service for the prior regulatory year (2013-14).
$\Delta CPI_t$	2.93%	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 2014-15 prices for each of Aurora’s public light tariffs are outlined in Table 21.

**Table 21: Proposed tariffs for public lighting types**

Lighting type	Price (c/day)
50W mercury vapour (Obsolete)	33.094
80W mercury vapour – Aeroscreen	33.094
80W mercury vapour – Artcraft decorative (Obsolete)	52.427
125W mercury vapour (Obsolete)	38.106
250W mercury vapour (Obsolete)	38.548
400W mercury vapour (Obsolete)	42.826
70W sodium vapour	35.246
100W sodium vapour	35.508
150W sodium vapour	39.248
250W sodium vapour	39.369
400W sodium vapour	39.565
150W metal halide	39.248
250W metal halide	39.369
42W compact fluorescent	35.190

The proposed 2014-15 prices for each of Aurora's contract light tariffs are outlined in Table 22.

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

Lighting type	Price (c/day)
50W mercury vapour	22.607
80W mercury vapour - Aeroscreen	22.596
125W mercury vapour	23.613
250W mercury vapour	23.683
400W mercury vapour	23.736
70W sodium vapour	22.786
150W sodium vapour	24.302
250W sodium vapour	24.268
400W sodium vapour	24.340
150W metal halide	24.302
250W metal halide	24.268
400W metal halide	24.268
1 x 20W fluorescent	22.659
2 x 20W fluorescent	22.774
1 x 40W fluorescent	22.667
2 x 40W fluorescent	23.792
3 x 40W fluorescent	23.915
4 x 40W fluorescent	24.716
60W incandescent	22.594
100W incandescent	23.598
Pole surcharge	20.733

## 7.4. Fee-based services

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

### 7.4.1. Overview

Fee-based services are those services provided by Aurora 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 Aurora 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 costs inputs in providing these services do not involve material variations.

These fee-based service types are shown in Table 23.

**Table 23:** 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 Aurora 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 exists.
<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.

Service	Description
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 Aurora distribution network are now covered by Aurora's 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>
<b>Supply abolishment</b>	
Remove service and meters	Remove meters and service connection at customer's request or 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.

Service	Description
<p><b>Renewable energy connection</b></p> <p><i>These fee-based services are no longer available to any customer. Customers wishing to establish a renewable energy connection to the Aurora distribution network are now covered by Aurora's connection fees established in accordance with the provisions of the National Energy Customer Framework.</i></p>	
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>
<p><b>Temporary builders connection</b></p> <p><i>These fee-based services are no longer available to any customer. Customers wishing to establish a temporary connection to the Aurora distribution network are now covered by Aurora's connection fees established in accordance with the provisions of the National Energy Customer Framework.</i></p>	
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>
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>

Service	Description
<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 Aurora distribution network in accordance with the provisions of the National Energy Customer Framework.</i>	
Temporary supply – underground	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply – overhead mains	<i>This fee-based service is no longer available to any customer.</i>
Temporary supply – overhead service	<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>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 Aurora 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.

Service	Description
<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.
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 Aurora distribution network are now covered by Aurora's 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 Aurora distribution network are now covered by Aurora's 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 2014-15 fee-based services tariffs

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

The 2014-15 fee-based 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.

Aurora's price caps for the provision of fee-based services are calculated in accordance with the formula given by the AER in its distribution determination and requires:

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



Table 24 provides details of the price cap calculation that Aurora has utilised in the preparation of its fee-based services tariffs.

**Table 24: Price cap**

Component	Value	Comment
$P_{t-1}$	Various	The price for each fee-based service for the prior regulatory year (2013-14).
$\Delta CPI_t$	2.93%	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 2014-15 prices for each of Aurora's fee-based services tariffs are outlined in Table 25.

**Table 25: Proposed tariffs for fee-based services**

Service	Price (\$)
<b>Energisation, de-energisation, re-energisation and special reads</b>	
Site visit – no appointment	53.77
Site visit – non scheduled visit	121.20
Site visit – same day premium service	313.11
Site visit – after hours	808.01
Site visit – credit action or site issues	78.81
Site visit – interval metering	60.59
<b>Meter alteration</b>	
Tariff alteration – single phase	180.21
Tariff alteration – three phase	245.75
Adjust time clock	58.98
Install pulse outputs	163.83
Remove meter	272.39
Meter alteration – after hours visit	786.37
Meter alteration – wasted visit	98.30
<b>Meter test</b>	
Meter test – single phase	294.89
Meter test – multi phase	589.78
Meter test – CT	655.31
Meter test – after hours	786.37
Meter test –wasted visit	98.30

Service	Price (\$)
<b>Supply abolishment</b>	
Remove service & meters	272.39
Supply abolishment – after hours	786.37
Supply abolishment – wasted visit	163.43
<b>Truck tee-up</b>	
Tee-up – initial 30 minutes	130.79
Tee-up – each additional 15 minutes	53.75
Tee-up – after hours	1,469.56
Tee-up – no truck – after hours	1,307.50
Tee-up – wasted visit	163.43
<b>Miscellaneous services</b>	
Open turret	147.45
Data download	327.65
Alteration to unmetered supply	245.75
Miscellaneous service	131.06
Miscellaneous service – after hours	786.37
Miscellaneous service – wasted visit	163.43
Miscellaneous service – rectification of illegal connection	245.75

## 7.5. Quoted services

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

### 7.5.1. Overview

Aurora 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. Aurora provides a range of non-standard services on a quoted basis including, but not limited to:

- removal or relocation of Aurora's assets at a customer's (for example, the Tasmanian Government) request;
- services that are provided at a higher standard than the standard service, due to a customer's request for Aurora 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 2014-15 quoted services tariffs

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

The 2014-15 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.

Aurora's price caps for the provision of quoted services are calculated in accordance with the formula given by the AER in its distribution determination and requires:

$$P = \sum (Units_i \times LR_i) + Materials + Contractors + OtherCosts + Overheads$$

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

Aurora's price caps for the labour rates within quoted services are calculated in accordance with the formula given by the AER in its distribution determination and requires:

$$LR_i = LR_t \times (CPI_t / CPI_{2011})$$

Table 26 provides details of the labour rate cap calculation that Aurora has utilised in the preparation of its quoted services tariffs.

**Table 26: Price cap**

Component	Value	Comment
$LR_t$	Various	The price for each quoted service labour rate as given in the AER's distribution determination.
$CPI_t$	105.40	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.
$CPI_{2011}$	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.

Aurora 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 2014-15 prices for each of Aurora's quoted services tariffs are outlined in Table 27.

**Table 27:** Proposed tariffs for quoted services

Labour	Price (\$/hour)
Apprentice	73.00
Cable jointer	60.56
Customer connections – commercial metering	67.57
Customer connections – service crew	60.86
Designer	75.90
Distribution electrical technician	60.60
Distribution linesman	55.41
Distribution linesman – live line	60.43
Distribution operator	65.36
Electrical inspector	64.85
Field service co-ordinator	84.74
Labourer – overhead	51.06
Meter reader	46.55
Pole tester	50.75
Project manager	76.92

## 8. Proposed tariff variations

### 8.1. Adjustments to tariffs within a regulatory year

Clause 6.18.2(b)(5) of the Rules requires that Aurora's 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 Aurora that they intend to alter their demand or connection characteristics during 2014-15. In this case, Aurora would recalculate the charging parameters of the tariff.

New network tariffs will also be created for each ITC customer that connects during 2014-15, in line with the methodology set out in this Annual Pricing Proposal.

Aurora does not anticipate any changes to network tariffs within any other tariff classes in the course of the 2014-15 regulatory year.

#### 8.1.2. Alternative control services

##### 8.1.2.1. Public lighting services

At the time of preparing this Annual Pricing Proposal, Aurora is undertaking a trial for the provision of new public lighting technology. Aurora anticipates that this trial will result in the provision of lighting types that were not considered at the time of the AER's distribution determination. Where new public lighting types are to be utilised by Aurora they will become a negotiated distribution service and not a public lighting service as contemplated by the AER's distribution determination.

Any newly introduced lighting types may also result in the obsolescence of existing public lighting services. By way of example, Aurora is aware of the potential to replace the currently offered 42 watt compact fluorescent lighting type with a 32 watt equivalent. Should this occur, Aurora will cease to offer the 42W version to new customers during the 2014-15 regulatory year and will replace any defective 42W lights with the 32W equivalent as a component of Aurora's maintenance regime. This change may mean that the 42W compact fluorescent public lighting tariff is made obsolete during the 2014-15 regulatory year and will not be available to new customers.

### 8.2. Variations between the regulatory years 2013-14 and 2014-15

#### 8.2.1. Standard control services

Due to the carry forward of adjustments from the previous regulatory control period, Aurora's total revenue has increased by approximately 1.1 per cent between 2013-14 and 2014-15, while its customer consumption is expected to decrease by approximately 0.85 per cent.

To meet this increase in revenue, Aurora has adopted the following general strategies for its network tariffs for 2014-15. 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 the DUoS revenue 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 increase by approximately 3.9 per cent and total TUoS revenue by approximately (5.1) 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 Aurora’s Network Tariff Strategy. For the 2014-15 regulatory year, the nursing home network tariff will be increased by CPI + 6 per cent, however in subsequent years the process of aligning this tariff to other tariff offerings will be accelerated;
- customers on the General Network – Business Curtilage network tariff have previously received a discounted daily charge in line with Aurora’s Network Tariff Strategy. For the 2014-15 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; 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. Aurora is cognisant of the costs that are borne by small consumption customers and has in most instances therefore chosen to increase fixed charges by no more than the increase in the DUoS revenue. Customers on network tariff TASCURT will however see a larger increase as Aurora continues to unwind its curtilage discount.

This decision will mean that a rebalance between fixed and variable charges will occur, as variable charges will increase by more than CPI to ensure an appropriate revenue recovery.

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

Aurora anticipates an under recovery of total revenue from its tariffs in 2013-14, with individual network tariff components resulting in an under recovery of both DUoS and TUoS revenues.

Aurora 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 charges from Transend and the Revenue Cap allowable to Aurora inclusive of the anticipated under recovery.

#### **8.2.2. Alternative control services**

Alternative control services have increased in price in accordance with the AER’s distribution determination only.

## **8.3. Change to certain tariffs**

### **8.3.1. Standard control services**

Consistent with its tariff strategy, Aurora has consolidated its irrigation tariff offerings into a single tariff. This consolidation means that network tariff TAS73, available during the 2013-14 regulatory year, has been abolished and will not be available to any customer from 31 July 2014. Aurora has also abolished its low voltage kW demand tariff meaning that network tariff TAS83, available during the 2013-14 regulatory year, will not be available to any customer from 1 July 2014

Aurora has consulted with any affected customers on the network tariff reassignment that will occur as a result of this tariff consolidation.

During the 2014-15 regulatory control year, Aurora will undertake customer consultation in respect to changes to the TAS15 tariff terms and conditions. Consistent with its tariff strategy, Aurora intends to align the specified demand determination process with the reserved network capacity for customers on TAS15.

### **8.3.2. Alternative control services**

#### **8.3.2.1. Public lighting services**

Consistent with its public lighting strategy, Aurora has consolidated a number of its public lighting services. This consolidation meant that a number of public lighting services, available during the 2012-13 regulatory year, were abolished and not be available to any customer from 1 July 2013. There has not been further consolidation of the public lighting services during the 2013-14 regulatory year, however Aurora will continue to consult with customers in regards to further consolidation anticipated in future regulatory years.

#### **8.3.2.2. 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, were not available to any customer from 1 July 2013 as a fee-based service. These services are now covered as a component of Aurora's connection processes.

## 9. Transmission cost recovery

Clauses 6.18.2(b)(6) and 6.18.7 of the Rules 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:

### Expenses:

- regulated transmission charges paid to Transend; and
- avoided TUoS payments to embedded generators.

### Receipts:

- payments received from network users.

### Adjustments for under/over recovery:

- difference between receipts and expenses.

## 9.1. TUoS Expenses

### 9.1.1. Transmission charges

Transmission charges are considered as a direct pass-through with variations in transmission charges being passed through to all installations on a pro rata basis through the network tariffs.

Aurora is connected to Transend's transmission network at multiple connection points within Tasmania, as are a number of other customers. Transend recovers its allowable revenue from Aurora and the other customers connected to its network.

Aurora is required to pay these TUoS charges to Transend on a monthly basis and it is these charges that form the basis of the TUoS charges within Aurora's network tariffs.

### 9.1.2. Standard transmission charges

A number of customers, or groups of customers, may have a specially calculated network tariff. As part of this 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 Transend terminal substation to which the customer is connected.

### 9.1.3. Avoided TUoS

The Rules require Aurora to pay avoided TUoS usage charges (avoided TUoS) to embedded generators who have generated electricity and transmitted this energy into Aurora's 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, Aurora shall:

- (a) determine the charges for the locational component of prescribed TUoS services that would have been payable by Aurora 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 Aurora; 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 the embedded generator is connected. Avoided TUoS has therefore been assigned to all tariff classes.

Aurora has avoided TUoS for the purposes of this calculation.

## 9.2. TUoS Receipts

### 9.2.1. Tariff recovery of TUoS

A description of how TUoS is recovered through Aurora's standard control network tariffs is given in section 6.3.2.

## 9.3. TUoS unders and overs account

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

Table 28 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 28:** TUoS unders and overs account

(\$ million)	year t-2 (actual)	year t-1 (estimate)	year t (forecast)
Revenue from TUoS charges	120.96	124.42	123.650
Less total transmission related payments	126.13	125.84	116.050
Transmission charges to be paid to TNSP	126.13	125.75	116.050
Avoided TUoS payments	0.00	0.10	0.000
Under/over recovery for regulatory year	-5.16	-1.42	7.600
TUoS under and overs account			
Nominal WACC	8.28%	8.28%	8.28%
Opening balance	0.00	-5.59	-7.600
Interest on opening balance	0.00	-0.46	0.000
Under/over recovery for regulatory year	-5.16	-1.42	7.600
Interest on under/over recovery for regulatory year	-0.43	-0.12	0.000
Closing balance	-5.59	-7.60	0.000

## 10. Compliance with regulatory requirements

### 10.1. DUoS unders and overs account

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

Table 29 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 29:** DUoS unders and overs account

(\$ million)	year t-2 (actual)	year t-1 (estimate)	year t (forecast)
Revenue from DUoS charges	264.959	277.801	300.459
Less MAR for the relevant year	276.400	279.813	284.866
Allowed revenue (AR <sub>t</sub> )	276.400	280.477	284.642
Transitional (transitional <sub>t</sub> )	0.000	-1.512	0.000
Electrical safety inspection service adjustment (ESISC <sub>t</sub> )	0.000	0.696	0.101
National energy market charge adjustment (NEMC <sub>t</sub> )	0.000	0.152	0.122
Approved pass throughs (Passthrough <sub>t</sub> )	0.000	0.000	0.000
Under/over recovery for regulatory year	-11.441	-2.012	15.593
DUoS under and overs account			
Nominal WACC	8.28%	8.28%	8.28%
Opening balance	0.000	-12.389	-15.593
Interest on opening balance	0.000	-1.026	0.000
Under/over recovery for regulatory year	-11.441	-2.012	15.593
Interest on under/over recovery for regulatory year	-0.947	-0.167	0.000
Closing balance	-12.389	-15.593	0.000

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

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

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

### **10.2.1. Stand-alone costs**

Aurora 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 Aurora's 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.

### **10.2.2. Avoidable cost**

Aurora 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 maintenance of 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**

Aurora 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.

Aurora's 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.

Aurora interpreted avoidable cost for all tariff classes as 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.

Aurora 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 not 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 costs on assets that are directly attributable to the customers within that tariff class – are avoidable.

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

#### **10.2.3.2. Alternative control services**

Aurora 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.

The use of a cost based formula for pricing implies that if there were only one alternative control service tariff class provided by Aurora, then total revenue for that tariff class would equal the total cost of serving that tariff class (where 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 Aurora provides more than one alternative control service tariff class, the allocation of 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 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.

Aurora 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, for each network tariff and tariff class, the 2013-14 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.

Aurora's 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. Aurora 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 Aurora's 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. Aurora 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 maintenance of connection assets designated to that tariff class.

The outcomes of Aurora's cost and pricing models are set out in Table 30. The table shows the stand-alone and avoidable costs for each network tariff, compared to the expected revenue from network tariffs.

**Table 30: 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)	1.57	1.78	231.81
HV	Business HV kVA Specified Demand >2MVA (TAS15)	1.17	2.81	231.42
	Business HV kVA Specified Demand (TASSDM)	5.62	5.93	235.86
Irrigation	Irrigation LV TOU (TAS75) and LV Day/Night Irrigation (TAS73)	0.17	6.46	230.42
Large LV	Business LV kVA Demand (TAS82)	0.15	35.05	230.40
Small LV	Business LV General (TAS22)	1.70	45.20	231.95
	Business LV Nursing Homes (TAS34)	0.10	1.85	230.35
	General Network – Business, Curtilage (TASCURT)	0.16	3.65	230.41
	Business LV TOU (TAS94)	0.79	30.68	231.04
Residential	Residential LV General (TAS31)	2.52	118.54	232.77
	Residential LV PAYG TOU / Residential LV TOU (TAS92) (TAS93)	0.00	6.60	230.25
	Residential LV PAYG (TAS101)	0.11	15.43	230.36
Uncontrolled Energy	Uncontrolled LV Heating (TAS41)	0.00	21.58	230.25
Controlled Energy	Controlled LV Energy – Off Peak with afternoon boost (TAS61)	0.00	1.29	230.25
	Controlled LV Energy – Night period only (TAS63)	0.00	0.00	230.25

Tariff class	Tariff	Avoidable cost (\$m)	Expected revenue (\$m) excluding side constraint adjustment	Stand-alone cost (\$m)
Unmetered	UMS LV General (TASUMS)	0.00	1.05	230.25
Streetlights	UMS LV Public Lighting (TASUMSSL)	0.01	2.47	230.26
Embedded Generator <sup>1</sup>	Residential LV Import Transitional (TASX1I)	0.00	0.00	0.00
	Business LV Import Transitional (TASX2I)	0.00	0.00	0.00
	Residential LV Import Fair and Reasonable (TASX4I)	0.00	0.00	0.00
	Business LV Import Fair and Reasonable (TASX5I)	0.00	0.00	0.00
	Non-Qualifying Import (TASX6I)	0.00	0.00	0.00

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

The outcomes of Aurora’s cost and pricing models are also set out in Table 31. The table shows the stand-alone and avoidable costs for each tariff class, compared to the expected revenue from the network tariffs within that tariff class.

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

Tariff class	Avoidable cost (\$m)	Expected revenue (\$m) excluding side constraint adjustment	Stand-alone cost (\$m)
ITC	1.57	1.78	231.81
HV	6.79	8.47	467.29
Irrigation	0.54	6.46	461.03
Large LV	0.15	35.05	230.40
Small LV	2.75	81.39	923.74
Residential	2.63	140.58	693.38
Uncontrolled Energy	0.00	21.58	230.25
Controlled Energy	0.00	1.29	460.50
Unmetered	0.01	1.05	230.26
Streetlights	0.01	2.47	230.26

Tariff class	Avoidable cost (\$m)	Expected revenue (\$m) excluding side constraint adjustment	Stand-alone cost (\$m)
Embedded Generation <sup>1</sup>	0.00	0.00	0.00

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 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.

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

Aurora 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 signals. Aurora's 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.

Aurora 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 due to limitations with current metering; 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 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.

Aurora has not altered the structure or format of its network tariffs from the previous regulatory year in any material way. Aurora's 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 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 Aurora’s 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 requirement.

The demand charges provide a strong signal to customers on the use of the shared network, and to reduce maximum demands.

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 therefore their charges will rise. 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 provides that if, as a result of the operation of clause 6.18.5(b), Aurora may not recover the expected revenue, tariffs will be adjusted in accordance with clause 6.18.5(c) of the Rules, so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

Aurora does not need to apply this clause of the Rules as the operation of clause 6.18.5(b) does not impact on Aurora’s ability to recover the expected revenue.

## 10.7. Compliance with side constraints

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

$$\frac{\sum_{j=1}^m d_t^j \times q_t^j}{\sum_{j=1}^m d_{t-1}^j \times q_t^j} \leq (1 + \Delta CPI_t) \times (1 - X_t) \times (1 + 2\%) \times (1 + S_t) \pm \text{passthrough}_t \pm ESISC_t \pm NEMC_t \pm DUOS_t \pm \text{transitional}_t$$

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.
- $S_t$  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.
- $\text{passthrough}_t$  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 applies side constraints in relation to weighted average revenue increases between regulatory years.

As Aurora's X factor for the 2014-15 regulatory year is 1.50 and therefore greater than zero, when applying the AER's side constraint formula, Aurora has set the value of  $X_t$  to zero for the purposes of the side constraint formula.

Aurora confirms that each of its tariff classes for the 2014-15 regulatory year are within the weighted average revenue increases allowed in accordance with clause 6.18.6 of the Rules and the AER's side constraint formula.

The results of Aurora's compliance with the side constraint requirements are shown in Table 32.

**Table 32:** Side constraint compliance for 2014-15

Tariff class	Weighted average revenue 2013-14 (\$m)	Anticipated revenue 2014-15 (\$m)	% change (calculated)	% change (allowed by side constraint)
ITC	1.681	1.777	5.72	10.56
HV	8.366	8.741	4.48	10.56
Irrigation	6.148	6.458	5.03	10.56
Large LV	32.736	35.049	7.06	10.56
Small LV	77.136	81.389	5.51	10.56
Residential	133.502	140.577	5.30	10.56
Uncontrolled Energy	19.648	21.579	9.83	10.56
Controlled Energy	1.209	1.287	6.43	10.56
Unmetered	0.982	1.051	7.00	10.56
Streetlights	2.399	2.471	3.00	10.56

## 11. Customer price impacts

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

#### 11.1.1. Standard control services

Aurora’s pricing strategy is cognisant of the changing expectations of customers and the current upward pressure being exerted on energy prices. As a business Aurora is committed to achieving a balanced commercial outcome between meeting the requirements of customers and managing sustainability and risk.

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

Table 33 provides the difference in the charges between 2013-14 and 2014-15 for each ITC<sup>5</sup> network tariff. This table is used to give an estimate of the percentage component change for each customer.

**Table 33:** Estimated percentage price change by ITC tariff 2013-14 to 2014-15

Tariff class	NMI / Tariff	Tariff Component	DUoS charge 2013-14 (cents)	DUoS charge 2014-15 (cents)	Change (%)	
ITC		Confidential				
		Confidential				
		Confidential				
		Confidential				

<sup>5</sup> ITC tariff rates are confidential.

Tariff class	NMI / Tariff	Tariff Component	DUoS charge 2013-14 (cents)	DUoS charge 2014-15 (cents)	Change (%)	
ITC		Confidential				
			Confidential			
HV	TAS15	Daily	1,768.800	1892.600	7.00	
		Peak energy	1.677	1.794	6.98	
		Shoulder energy	0.454	0.486	7.05	
		Off-peak energy	0.057	0.061	7.02	
		Specified demand	10.653	11.399	7.00	
		Excess demand	53.265	56.995	7.00	
		Specified connection	0.387	0.414	6.98	
		Excess connection	1.935	2.070	6.98	

Table 34 provides the difference in the charges between 2013-14 and 2014-15 for each locational TUoS charge. This table is used to give an estimate of the percentage component change for each transmission connection point.

**Table 34:** Estimated percentage price change for locational TUoS charges 2013-14 to 2014-15

Transmission node identifier	Transmission node description	TUoS charge 2013-14 c/kVA/day	TUoS charge 2014-15 c/kVA/day	Change (%)
TAL2	Arthurs Lake	37.600	19.379	-48.46
TAV2	Avoca	28.487	26.214	-7.98
TBU3	Burnie	21.475	20.711	-3.56
TBW2	Bridgewater	23.618	22.070	-6.55
TDB2	Derwent Bridge	431.839	347.199	-19.60
TDE2	Derby	55.598	44.172	-20.55
TDP2	Devonport	24.380	23.186	-4.90
TEB2	Emu Bay	31.361	28.391	-9.47
TEL2	Electrona	32.587	29.253	-10.23
TKE2	Kermandie	52.153	45.268	-13.20
TKI2	Kingston 11kV	28.928	27.911	-3.52
TKI3	Kingston 33kV	0.000	25.391	0.00

Transmission node identifier	Transmission node description	TUoS charge 2013-14 c/kVA/day	TUoS charge 2014-15 c/kVA/day	Change (%)
TKR2	Knights Road	31.747	30.529	-3.84
TMB2	Meadowbank	24.644	24.252	-1.59
TNN2	New Norfolk	27.328	25.065	-8.28
TNT2	Newton	50.086	47.156	-5.85
TPL2	Port Latta	28.694	25.885	-9.79
TPM3	Palmerston	27.944	25.227	-9.72
TQT2	Queenstown	40.788	35.876	-12.04
TRA2	Railton	24.482	23.116	-5.58
TRB2	Rosebery	24.302	23.542	-3.13
TSD2	Scottsdale	58.733	47.072	-19.85
TSM2	St Marys	36.731	34.937	-4.88
TSO2	Sorell	31.774	29.153	-8.25
TSR2	Savage River	30.422	27.897	-8.30
TST2	Smithton	35.407	31.357	-11.44
TTB2	Triabunna	53.268	34.632	-34.99
TTU2	Tungatinah	112.738	93.500	-17.06
TUL2	Ulverstone	24.061	22.242	-7.56
TWA2	Waddamana	55.208	41.288	-25.21
TWV2	Wesley Vale	72.784	51.852	-28.76
TVN1	Hobart Virtual	24.814	22.090	-10.98
TVN2	Tamar Virtual	18.946	18.652	-1.55

Table 35 provides the difference in the charges between 2013-14 and 2014-15 for each network tariff. This table is used to give an estimate of the percentage component change for each customer.

**Table 35:** Estimated percentage price change by tariff class 2013-14 to 2014-15

Tariff class	Tariff	Tariff Component	NUoS charge 2013-14 (cents)	NUoS charge 2014-15 (cents)	Change (%)
HV	TASSDM	Daily	133.463	142.805	7.00
		Peak energy	1.611	1.624	0.81
		Shoulder energy	1.287	1.220	-5.21
		Off-peak energy	0.747	0.703	-5.89
		Specified demand	22.979	23.491	2.23
		Excess demand	229.790	234.910	2.23

Tariff class	Tariff	Tariff Component	NUoS charge 2013-14 (cents)	NUoS charge 2014-15 (cents)	Change (%)
Irrigation	TAS75	Daily	187.817	200.964	7.00
		Peak energy	15.287	15.642	2.32
		Shoulder energy	9.554	9.582	0.29
		Off-peak energy	1.521	1.498	-1.51
	TAS73	Daily	187.817	200.964	7.00
		Day Energy	16.016	9.582	-40.17
Night Energy		1.543	1.498	-2.92	
Large LV	TAS82	Daily	190.738	204.090	7.00
		Energy	3.028	3.098	2.31
		Demand	52.206	52.621	0.79
Small LV	TAS22	Daily	39.084	41.820	7.00
		Energy	15.505	15.748	1.57
	TAS34	Daily	39.084	41.820	7.00
		1 <sup>st</sup> 500kWh energy	14.993	15.748	5.04
		Remaining energy	7.543	8.216	8.92
	TASCURT	Daily charge	19.542	25.092	28.40
		Energy	15.505	15.748	1.57
	TAS94	Daily	39.885	42.677	7.00
		Peak energy	14.260	14.637	2.64
		Shoulder energy	9.213	9.422	2.27
		Off-peak energy	1.518	1.546	1.84
	Residential	TAS31	Daily	39.084	41.820
Energy			15.505	15.748	1.57
TAS101		Daily	39.084	41.820	7.00
		Energy charge	8.020	8.142	1.52
TAS93 / TAS92		Daily charge	39.084	41.820	7.00
		Peak energy	13.195	13.670	3.60
		Shoulder energy	8.233	8.460	2.76
		Off-peak energy	1.518	1.535	1.12
Uncontrolled Energy		TAS41	Daily	4.232	4.528
	Energy		4.688	4.744	1.19
Controlled Energy	TAS61	Daily	7.934	8.489	7.00
		Energy	1.638	1.670	1.95

Tariff class	Tariff	Tariff Component	NUoS charge 2013-14 (cents)	NUoS charge 2014-15 (cents)	Change (%)
	TAS63	Daily	7.934	8.489	7.00
		Energy	1.543	1.496	-3.05
Unmetered	TASUMS	Daily	39.084	41.820	7.00
		Energy	17.189	18.023	4.85
Streetlights	TASUMSSL	Demand	0.141	0.144	2.13

### 11.1.2. Alternative control services

The price changes between 2013-14 and 2014-15 for alternative control services are provided in the following tables.

#### 11.1.2.1. Metering services

Table 36 provides the difference in the charges between 2013-14 and 2014-15 for the provision of metering services.

**Table 36:** Estimated percentage price change 2013-14 to 2014-15

Tariff	Price 2013-14 (c/day)	Price 2014-15 (c/day)	Percentage change (%)
Domestic LV – single phase	7.135	7.344	2.93
Domestic LV – multi phase	14.806	15.240	2.93
Domestic LV – CT meters	18.323	18.860	2.93
Domestic LV – single phase (remote read)	6.133	6.313	2.93
Domestic LV – multi phase (remote read)	13.869	14.275	2.93
Domestic LV – CT meters (remote read)	19.986	20.572	2.93
Business LV – single phase	7.380	7.596	2.93
Business LV – multi phase	14.763	15.196	2.93
Business LV – CT meters	19.091	19.650	2.93
Business LV – single phase (remote read)	6.133	6.313	2.93
Business LV – multi phase (remote read)	13.869	14.275	2.93
Business LV – CT meters (remote read)	19.986	20.572	2.93
Other meters (PAYG)	13.029	13.411	2.93

### 11.1.2.2. Public lighting services

Table 37 provides the difference in the charges between 2013-14 and 2014-15 for the provision of public lighting services.

**Table 37:** Estimated percentage price change 2013-14 to 2014-15

Tariff	Price 2013-14 (c/day)	Price 2014-15 (c/day)	Percentage change (%)
50W mercury vapour	33.010	33.094	0.25
80W mercury vapour – Aeroscreen	33.010	33.094	0.25
80W mercury vapour – Artcraft decorative	52.294	52.427	0.25
125W mercury vapour	38.010	38.106	0.25
250W mercury vapour	38.450	38.548	0.25
400W mercury vapour	42.718	42.826	0.25
70W sodium vapour	35.157	35.246	0.25
100W sodium vapour	35.418	35.508	0.25
150W sodium vapour	39.149	39.248	0.25
250W sodium vapour	39.269	39.369	0.25
400W sodium vapour	39.465	39.565	0.25
150W metal halide	39.149	39.248	0.25
250W metal halide	39.269	39.369	0.25
42W compact fluorescent	35.101	35.190	0.25

Table 38 provides the difference in the charges between 2013-14 and 2014-15 for the provision of contract lighting services.

**Table 38:** Estimated percentage price change 2013-14 to 2014-15

Tariff	Price 2013-14 (c/day)	Price 2014-15 (c/day)	Percentage change (%)
50W mercury vapour	22.550	22.607	0.25
80W mercury vapour	22.539	22.596	0.25
125W mercury vapour	23.553	23.613	0.25
250W mercury vapour	23.623	23.683	0.25
400W mercury vapour	23.676	23.736	0.25
70W sodium vapour	22.728	22.786	0.26
150W sodium vapour	24.240	24.302	0.26
250W sodium vapour	24.207	24.268	0.25
400W sodium vapour	24.278	24.340	0.26
150W metal halide	24.240	24.302	0.26
250W metal halide	24.207	24.268	0.25

Tariff	Price 2013-14 (c/day)	Price 2014-15 (c/day)	Percentage change (%)
400W metal halide	24.207	24.268	0.25
1 x 20W fluorescent	22.602	22.659	0.25
2 x 20W fluorescent	22.716	22.774	0.26
1 x 40W fluorescent	22.610	22.667	0.25
2 x 40W fluorescent	23.732	23.792	0.25
3 x 40W fluorescent	23.854	23.915	0.26
4 x 40W fluorescent	24.653	24.716	0.26
60W incandescent	22.537	22.594	0.25
100W incandescent	23.538	23.598	0.25
Pole surcharge	20.681	20.733	0.25

### 11.1.2.3. Fee-based services

Table 39 provides the difference in the charges between 2013-14 and 2014-15 for the provision of fee-based services.

**Table 39:** Estimated percentage price change 2013-14 to 2014-15

Tariff	Price 2013-14 (\$)	Price 2014-15 (\$)	Percentage change (%)
<b>De-energisation, re-energisation and special reads</b>			
Site visit – no appointment	53.14	53.77	1.19
Site visit – non scheduled visit	119.79	121.20	1.18
Site visit – same day premium service	309.46	313.11	1.18
Site visit – after hours	798.59	808.01	1.18
Site visit – credit action or site issues	77.89	78.81	1.18
Site visit – interval metering	59.88	60.59	1.19
<b>Meter alteration</b>			
Tariff alteration – single phase	178.11	180.21	1.18
Tariff alteration – three phase	242.88	245.75	1.18
Adjust time clock	58.29	58.98	1.18
Install pulse outputs	161.92	163.83	1.18
Remove meter	269.21	272.39	1.18
Meter alteration – after hours visit	777.20	786.37	1.18
Meter alteration – wasted visit	97.15	98.30	1.18
<b>Meter test</b>			
Meter test – single phase	291.45	294.89	1.18



Tariff	Price 2013-14 (\$)	Price 2014-15 (\$)	Percentage change (%)
Meter test – multi phase	582.90	589.78	1.18
Meter test – CT	647.67	655.31	1.18
Meter test – after hours	777.20	786.37	1.18
Meter test –wasted visit	97.15	98.30	1.18
<b>Supply abolishment</b>			
Remove service & meters	269.21	272.39	1.18
Supply abolishment – after hours	777.20	786.37	1.18
Supply abolishment – wasted visit	161.52	163.43	1.18
<b>Truck tee-up</b>			
Tee-up – initial 30 minutes	129.26	130.79	1.18
Tee-up – each additional 15 minutes	53.12	53.75	1.19
Tee-up – after hours	1,452.42	1,469.56	1.18
Tee-up – no truck – after hours	1,292.25	1,307.50	1.18
Tee-up – wasted visit	161.52	163.43	1.18
<b>Miscellaneous services</b>			
Open turret	145.73	147.45	1.18
Data download	323.83	327.65	1.18
Alteration to unmetered supply	242.88	245.75	1.18
Miscellaneous service	129.53	131.06	1.18
Miscellaneous service – after hours	777.20	786.37	1.18
Miscellaneous service – wasted visit	161.52	163.43	1.18
Miscellaneous service – rectification of illegal connection	242.88	245.75	1.18

#### 11.1.2.4. Quoted services

Table 40 provides the difference in the labour rate charges between 2013-14 and 2014-15 for the provision of quoted services.

**Table 40:** Estimated percentage price change 2013-14 to 2014-15

Tariff	Price 2013-14 (\$/hour)	Price 2014-15 (\$/hour)	Percentage change (%)
Apprentice	75.370	73.000	-3.14
Cable jointer	60.220	60.560	0.56
Customer connections – commercial metering	67.520	67.570	0.07
Customer connections – service crew	60.800	60.860	0.10

Tariff	Price 2013-14 (\$/hour)	Price 2014-15 (\$/hour)	Percentage change (%)
Designer	75.730	75.900	0.22
Distribution electrical technician	60.570	60.600	0.05
Distribution linesman	55.370	55.410	0.07
Distribution linesman – live line	60.380	60.430	0.08
Distribution operator	65.070	65.360	0.45
Electrical inspector	64.540	64.850	0.48
Field service co-ordinator	84.380	84.740	0.43
Labourer – overhead	50.890	51.060	0.33
Meter reader	46.450	46.550	0.22
Pole tester	50.630	50.750	0.24
Project manager	75.790	76.920	1.49

## 12. Tariff development

As discussed in section 8.3, network tariff TAS83 – Business LV kW Demand – will not be available to any customer from 1 July 2014 and network tariff TAS73 – Irrigation LV Day/Night – will no longer be available from 31 July 2014.

Aurora 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 2014-15 regulatory year.

### 12.1. Future tariff changes

In light of the rapidly changing external environment, Aurora's 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. Aurora 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 requires that the AER must approve a Pricing Proposal if the AER is satisfied that:

- (1) the Proposal complies with this part, 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 Aurora provides audit certification from Synateq confirming that Aurora has completed this Annual Pricing Proposal in accordance with the requirements of the Rules and the AER's distribution determination.

## 14. Confidential information

Aurora considers that:

- the following sections within; or
- attachments to

this Annual Pricing Proposal contain confidential information.

Aurora considers that this information is confidential as it contains information that is not common knowledge or publicly available.

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

**Table 41:** Confidential information

Reference	Title
Annual Pricing Proposal – Table 9	Proposed tariffs for DUoS – standard control services – applying to ITC customers
Annual Pricing Proposal – Table 33	Estimated percentage price change by ITC tariff 2013-14 to 2014-15
PP008	Aurora DCoS Model
PP009	Aurora DCoS to Tariff Model
PP010	AER Tariff Reconciliation Model – revised tariff codes
PP011	AER Tariff Reconciliation Model – historic tariff codes

## 15. Attachments

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

**Table 42:** 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	Aurora DCoS Model (confidential)
PP009	Aurora DCoS to Tariff Model (confidential)
PP010	AER Tariff Reconciliation Model – revised tariff codes (confidential)
PP011	AER Tariff Reconciliation Model – historic tariff codes (confidential)
PP012	Synateq Audit Certification

## 16. Listing of figures and tables

### 16.1. Figures within this Annual Pricing Proposal

Figure 1:	Tariff development.....	15
-----------	-------------------------	----

### 16.2. Tables within this Annual Pricing Proposal

Table 1:	Structure of this document .....	2
Table 2:	Compliance obligations under the Rules.....	5
Table 3:	Revenue cap .....	14
Table 4:	Tariff classes – standard control services.....	21
Table 5:	Network tariff codes.....	26
Table 6:	Tariff charging parameters for DUoS charges .....	28
Table 7:	Tariff charging parameters for TUoS charges.....	29
Table 8:	Proposed tariffs for DUoS – standard control services .....	31
Table 9:	Proposed tariffs for DUoS – standard control services – TAS15 and TASCUS.....	32
Table 10:	Proposed tariffs for TUoS – standard control services.....	33
Table 11:	Proposed tariffs for locational TUoS – standard control services.....	35
Table 12:	Hobart region virtual transmission nodes.....	36
Table 13:	Tamar region virtual transmission nodes.....	36
Table 14:	Tariff classes for alternative control services.....	37
Table 15:	Meter classes for metering services.....	38
Table 16:	Price cap .....	39
Table 17:	Proposed tariffs for metering services .....	39
Table 18:	Public lighting types for public lighting services.....	41
Table 19:	Contract lighting types for public lighting services .....	42
Table 20:	Price cap .....	44
Table 21:	Proposed tariffs for public lighting types .....	44
Table 22:	Proposed tariffs for contract lighting types .....	45
Table 23:	Proposed fee-based services.....	46
Table 24:	Price cap .....	51
Table 25:	Proposed tariffs for fee-based services.....	51
Table 26:	Price cap .....	53
Table 27:	Proposed tariffs for quoted services .....	54
Table 28:	TUoS unders and overs account.....	59

---

Table 29:	DUoS unders and overs account.....	60
Table 30:	Stand-alone and avoidable cost boundaries .....	63
Table 31:	Stand-alone and avoidable cost boundaries .....	64
Table 32:	Side constraint compliance for 2014-15.....	67
Table 33:	Estimated percentage price change by ITC tariff 2013-14 to 2014-15.....	68
Table 34:	Estimated percentage price change for locational TUoS charges 2013-14 to 2014-15 .....	69
Table 35:	Estimated percentage price change by tariff class 2013-14 to 2014-15 .....	70
Table 36:	Estimated percentage price change 2013-14 to 2014-15 .....	72
Table 37:	Estimated percentage price change 2013-14 to 2014-15 .....	73
Table 38:	Estimated percentage price change 2013-14 to 2014-15 .....	73
Table 39:	Estimated percentage price change 2013-14 to 2014-15 .....	74
Table 40:	Estimated percentage price change 2013-14 to 2014-15 .....	75
Table 41:	Confidential information .....	79
Table 42:	Attachments .....	80



## 17. Glossary of terms/abbreviations

Term	Definition
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
ATMD	Any Time Maximum Demand
Aurora	Aurora Energy Pty Ltd
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
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
NEM	National Electricity Market
NEMC	National Energy Market Charge

Term	Definition
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
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>
Rules	National Electricity Rules
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