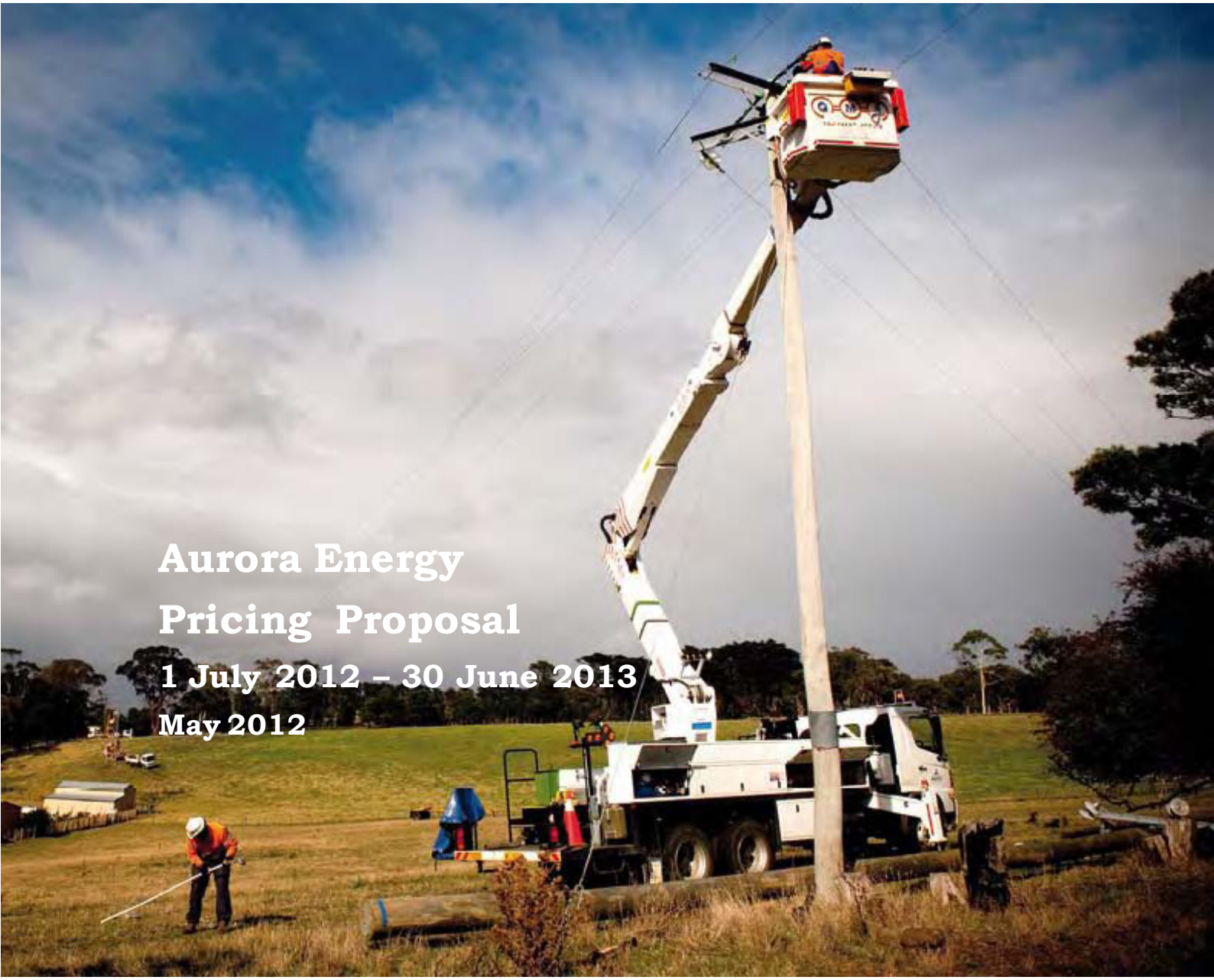
Meeting customer needs at the lowest sustainable cost



Aurora Energy Pricing Proposal

1 July 2012 – 30 June 2013

May 2012

Aurora Energy Pty Ltd
ABN 85 082 464 622
Level 3 / 21 Kirksway Place
Hobart TAS 7000
www.auroraenergy.com.au
Enquiries regarding this pricing proposal should be addressed to:
Network Regulatory Manager
Aurora Energy Pty Ltd
GPO Box 191
Hobart TAS 7001
e-mail: networktariff@auroraenergy.com.au

Table of Contents

1. Preface

The National Electricity Rules (Rules) requires that Aurora Energy Pty Ltd (Aurora) submit to the Australian Energy Regulator (AER), as soon as practicable, and in any case within 15 business days, after publication of the distribution determination, a pricing proposal (the Initial Pricing Proposal) for the first regulatory year of the regulatory control period.

This document is Aurora's Initial Pricing Proposal and has been prepared to comply with the requirements of the Rules and additional requirements, specified by the AER in its distribution determination.

All references to Aurora within this Initial Pricing Proposal, unless otherwise stated, are to Aurora in its capacity as a licensed Distribution Network Service Provider in the Tasmanian jurisdiction only.

2. Introduction

2.1. Scope

This Initial Pricing Proposal outlines the proposed network tariffs for standard control services and the proposed tariffs (prices) for alternative control services for the 2012-13 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 Initial 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 Initial 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 2011-12 and 2012-13 regulatory years.
9	Transmission cost recovery	Outlines how adjustments to charges for transmission costs resulting from overs and unders are calculated and recovered.

Section	Title	Purpose
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 Determination.
11	Customer impacts	Provides a discussion on the customer impacts as a result of the proposed tariffs for the 2012-13 regulatory year.
12	Tariff development	Outlines tariff development in the medium term, including additional tariffs, structural changes or removal of tariffs proposed over the 2012-2017 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 Initial Pricing Proposal are confidential and provides reasons in support of a confidentiality claim.
15	Attachments	Provides a listing of all attachments included with this Initial Pricing Proposal.
16	Listing of Figures and Tables	Provides a listing of the Figures and Tables within the Initial Pricing Proposal.
17	Glossary of terms/abbreviations	Defines the key terms and abbreviations used in this pricing proposal.

2.3. Purpose

This Initial 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 2012-13 regulatory year.

2.4. Historical pricing documentation

In the 2008–12 regulatory period, in addition to an annual pricing proposal, Aurora published five documents annually in relation to network tariffs and other services, being the Network Tariff Application Guide, Published Network Tariffs, Special Services Application Guide, Published Special Services Tariffs and Published Street Lighting Tariffs.

In the 2008–12 regulatory period, Aurora was also 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 will no longer publish this document on its website. However, Aurora will continue to consult on issues relating to network tariffs and pricing throughout the regulatory control period and include information on expected price trends and future tariff development in its annual Pricing Proposal.

Aurora will continue to publish Application and Price Guides for the provision of its distribution services. Aurora will however change the titles and structures of each of these documents to reflect the changes that have occurred in its regulatory environment consequential of the move from OTTER to the AER. An overview of these documents is set out in the sections below.

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

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

These documents are discussed below and are appended as an attachment to this Initial Pricing Proposal.

2.5.1. Network Tariff Application Guide

Aurora's Network Tariff Application Guide will include 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 seeking to understand the network tariff that is best suited to their individual circumstances and the requirements for the application of that chosen tariff.

Aurora intends to publish this document on an annual basis.

2.5.2. Network Tariff Price Guide

Aurora's Network Tariff Price Guide will include the network tariff codes and applicable rates for each of the network tariff components.

Aurora intends to publish this document on an annual basis.

2.5.3. Metering Services Application and Price Guide

Aurora's Metering Services Application and Price Guide will include 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 tariffs. It is a guide for customers seeking to understand the metering tariff that will apply to their individual circumstances and the requirements for the application of a chosen network tariff.

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

Aurora intends to publish this document on an annual basis.

2.5.4. Public Lighting Tariff Application and Price Guide

Aurora's Public Lighting Tariff Application and Price Guide will include a description of the public lighting services that Aurora provides, the terms and conditions surrounding those services and the charging components of public lighting services. It is a guide for customers seeking to understand the public lighting tariff that is best suited to their individual circumstances and the requirements for the application of that chosen tariff.

This Guide will also include the applicable rates for each of the public lighting services that Aurora will provide.

Aurora intends to publish this document on an annual basis.

2.5.5. Fee-based Services Application Guide

Aurora's Fee-based Services Application Guide will include a description of the fee-based services that Aurora provides and the terms and conditions surrounding those fees. 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.

Aurora intends to publish this document on an annual basis.

2.5.6. Fee-based Services Price Guide

Aurora's Fee-based Services Price Guide will include the applicable rates for each of the fee-based services that Aurora will provide.

Aurora intends to publish this document on an annual basis.

2.5.7. Quoted Services Application and Price Guide

Aurora's Quoted Services Application and Price Guide will include a description of the quoted services that Aurora provides and the terms and conditions surrounding those fees. 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 will also include the applicable rates for each of the labour components of the quoted services that Aurora will provide.

Aurora intends to publish this document on an annual basis.

2.6. Further information

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

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:

Network Regulatory Manager
GPO Box 191
Hobart TAS 7001
Phone 1300 132007
E-mail: networktariff@auroraenergy.com.au

2.7. Overview of compliance obligations

The matters that must be satisfied by the publication of this Initial 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(b)(1)	A pricing proposal must set out the tariff classes that are to apply for the relevant regulatory year.	section 6 section 7
6.18.2(b)(2)	A pricing proposal must set out the proposed tariffs for each tariff class.	section 6 section 7
6.18.2(b)(3)	A pricing proposal must set out, for each proposed tariff, the charging parameters and the elements of service to which each charging parameter relates.	section 6 section 7
6.18.2(b)(4)	A pricing proposal must set out, for each tariff class related to standard control services, the expected weighted average revenue for the relevant regulatory year and also for the current regulatory year.	section 10
6.18.2(b)(5)	A pricing proposal must set out the nature of any variation or adjustment to the tariff that could occur during the course of the regulatory year and the basis on which it could occur.	section 8
6.18.2(b)(6)	A pricing proposal must set out how designated pricing proposal charges are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous regulatory year.	section 6
6.18.2(b)(6A)	A pricing proposal must set out how jurisdictional scheme amounts are passed through to customers.	There are no jurisdictional schemes applicable to Aurora.
6.18.2(b)(6B)	A pricing proposal must describe how any amendments to jurisdictional scheme since the last jurisdictional scheme approval date meet 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

Clause	Pricing Proposal Requirement	Reference
6.18.3(a)	A pricing proposal must define the tariff classes into which 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 one or more tariff classes.	section 5
6.18.3(c)	Separate tariff classes must be constituted for customers to whom standard control services are supplied and customers to whom alternative control services are supplied (but a customer for both standard control services and alternative control services may be a member of 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 customers together on an economically efficient basis.	section 5
6.18.3(d)(2)	A tariff class must be constituted with regard to the need to avoid unnecessary transaction costs.	section 10
6.18.4(a)(1)	In formulating provisions of a distribution determination governing the assignment of 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 customers should be assigned to tariff classes on the basis of one or more of the following factors: (i) the nature and extent of their usage; (ii) the nature of their connection to the network; (iii) whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a regulatory obligation or requirement.	section 5
6.18.4(a)(2)	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 customers with a similar connection and usage profile should be treated on an equal basis.	section 5

Clause	Pricing Proposal Requirement	Reference
6.18.4(a)(3)	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 customers with micro-generation facilities should be treated no less favourably than customers without such facilities but with a similar load profile.	section 5.2
6.18.4(a)(4)	In formulating provisions of a distribution determination governing the assignment of customers to tariff classes or the re-assignment of customers from one tariff class to another, the AER must have regard to the principle that a 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.	section 5
6.18.4(a)(4)(b)	If the charging parameters for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.	section 5
6.18.5(a)	For each tariff class, the revenue expected to be recovered should lie on or between: (1) an upper bound representing the stand alone cost of serving the customers who belong to that class; and (2) a lower bound representing the avoidable cost of not serving those customers.	section 10
6.18.5(b)(1)	A tariff, and if it consists of two or more charging parameters, each charging parameter for a tariff class must take into account the long run marginal cost for the service or, in the case of a charging parameter, for the element of the service to which the charging parameter relates.	section 10
6.18.5(b)(2)(i)	A tariff, and if it consists of two or more charging parameters, each charging parameter for a tariff class must be determined having regard to transaction costs associated with the tariff or each charging parameter.	section 10

Clause	Pricing Proposal Requirement	Reference
6.18.5(b)(2)(ii)	A tariff, and if it consists of two or more charging parameters, each charging parameter for a tariff class must be determined having regard to whether 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(b)	This clause applies only to tariff classes related to the provision of standard control services. 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: (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% (2) CPI plus 2%.	section 10
6.18.6(d)	In deciding whether the permissible percentage has been exceeded in a particular regulatory year, the following are to be disregarded: (1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13; (2) the recovery of revenue to accommodate pass through of designated pricing proposal charges to customers; and (3) the recovery of revenue to accommodate pass through of jurisdictional scheme amounts for approved jurisdictional schemes.	section 10
6.18.6(e)	This clause does not, however, limit the extent a tariff for 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.	section 10

Clause	Pricing Proposal Requirement	Reference
6.18.7(a)	A pricing proposal must provide for tariffs designed to pass on to customers the designated pricing proposal charges to be incurred by the Distribution Network Service Provider for transmission use of system services.	section 9
6.18.7(b)	The amount to be passed on to customers for a particular regulatory year must not exceed the estimated amount of the designated pricing proposal charges adjusted for over or under recovery in accordance with paragraph (c).	section 9
6.18.7(c)	The over and under recovery amount must be calculated in a way that: (1) subject to subparagraphs (2) and (3) below, is consistent with the method determined by the AER in the relevant distribution determination for the Distribution Network Service Provider; (2) ensures a Distribution Network Service Provider is able to recover from customers no more and no less than the designated pricing proposal charges it incurs; and (3) adjusts for an appropriate cost of capital that is consistent with the rate of return used in the relevant distribution determination for the relevant regulatory year.	section 9
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: (1) recovered through the Distribution Network Service Provider's annual revenue requirement; (2) recovered under clause 6.18.7A; or (3) recovered from another Distribution Network Service Provider.	section 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.

Clause	Pricing Proposal Requirement	Reference
6.18.7A(c)	The over and under recovery amount must be calculated in a way that: (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; (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 (3) adjusts for an appropriate cost of capital that is consistent with the rate of return used in the relevant distribution determination for the relevant regulatory year.	There are no jurisdictional schemes applicable to 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.

Consistent with its purpose "to see the Tasmanian community prosper from its efforts", Aurora has made a significant contribution to the Tasmanian economy since its establishment. This has been provided through financial contributions to the Tasmanian Government to fund core Government services, its investment in the Tasmanian community in terms of employment, historic levels of capital expenditure, customer connections and its extensive support of Tasmanian suppliers.

Aurora's distribution business provides a 24-hour, seven day a week service to approximately 228,100 residential and 47,400 commercial distribution customers across the State, to ensure a safe and reliable electricity supply. Aurora's core distribution assets comprise 14,537 km of overhead high voltage lines, 7,139 km of overhead low voltage lines and 2,298 km of high and low voltage underground cables, 31,964 ground and pole mounted substations and 222,000 poles across an area of 67,800 square kilometres. Aurora also operates approximately 49,000 public lights and maintains them on behalf of local councils.

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. However, it is acknowledged that Aurora's distribution business is unable to influence the other elements of the supply chain which may cause increases to the final prices seen by customers.

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 customers who belong to that class; and

  (2) a lower bound representing the avoidable cost of not serving those 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 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 tariffs.

4.2. Setting the 2012-13 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 2012-13 network tariffs and charging parameters set out in this Initial 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:

$$MAR_t = AR_t \pm passthrough_t \pm ESISC_t \pm NEMC_t \pm transitional_t$$

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	276.400	As given in the AER's distribution determination
± passthrough	0.000	AER approved pass throughs
± ESISC	0.000	Adjustments for differences in the electrical safety levy
± NEMC	0.000	Adjustments for differences in the national energy market levy
± transitional	0.000	Adjustments arising from the 2008 OTTER determination
MAR	**276.400**	**Expected revenue including all adjustments**
Adjustments		
± Unders/Overs	0.000	Adjustment for under/over recovery of revenue in prior periods
Revenue Cap	**276.400**	**Total revenue for revenue cap**

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 'IPP001 – DCoS Methodology' appended as an attachment to this Initial 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 'IPP002 – DCoS to Tariff Methodology' appended as an attachment to this Initial Pricing Proposal.

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

Figure 1: Tariff development

Allowable revenue	Transmission Charges
Total revenue (revenue cap)	Total transmission charges (TUOS)
$276.400 m	$126.086 m

DCOS Supply Category							
Subtransmission	Zone Substations	High Voltage Network	Distribution Transformers	Low Voltage Network	Common Service	Connection	TUOS
$18.458 m	$16.971 m	$87.946 m	$31.077 m	$50.773 m	$58.036 m	$13.139 m	$126.086 m

DCOS Customer Class										
Unmetered	Streetlighting	Uncontrolled Energy	Controlled Energy	Residential	LV < 25kVA	LV > 25kVA < 70kVA	LV > 70kVA < 300kVA	LV > 300kVA	HV < 2MVA	HV > 2MVA
DUOS $0.048 m	DUOS $0.184 m	DUOS $24.521 m	DUOS $9.434 m	DUOS $149.331 m	DUOS $27.536 m	DUOS $13.577 m	DUOS $17.568 m	DUOS $11.077 m	DUOS $7.914 m	DUOS $15.211 m
TUOS $0.026 m	TUOS $0.099 m	TUOS $26.770 m	TUOS $0.753 m	TUOS $36.478 m	TUOS $14.787 m	TUOS $7.033 m	TUOS $13.098 m	TUOS $11.606 m	TUOS $3.862 m	TUOS $11.573 m

Tariff Category													
Unmetered	Streetlights	Uncontrolled Energy	Controlled Energy	Residential Light & Power (Single Rate)	Residential (Time of Use)	Commercial Light & Power (Single Rate)	Commercial (Time of Use)	Nursing Homes	LV Metered Demand	Irrigation	HV Metered Demand	HV Negotiated	Embedded Generation
DUOS $0.048 m	DUOS $0.184 m	DUOS $21.291 m	DUOS $6.860 m	DUOS $127.620 m	DUOS $27.259 m	DUOS $38.768 m	DUOS $10.971 m	DUOS $1.290 m	DUOS $10.693 m	DUOS $7.323 m	DUOS $7.914 m	DUOS $16.179 m	DUOS $0.00 m
TUOS $0.026 m	TUOS $0.099 m	TUOS $22.246 m	TUOS $0.464 m	TUOS $30.639 m	TUOS $10.459 m	TUOS $19.071 m	TUOS $7.359 m	TUOS $0.932 m	TUOS $12.353 m	TUOS $7.003 m	TUOS $3.862 m	TUOS $11.573 m	TUOS $0.00 m

Tariff Class										
Unmetered	Streetlighting	Uncontrolled Energy	Controlled Energy	Residential	Small LV	Large LV	HV	Irrigation	ITC	Embedded Generation
DUOS $1.044 m	DUOS $2.203 m	DUOS $20.355 m	DUOS $1.576 m	DUOS $123.249 m	DUOS $83.976 m	DUOS $26.622 m	DUOS $9.561 m	DUOS $6.212 m	DUOS $1.589 m	DUOS $0.00 m
TUOS $0.382 m	TUOS $0.876 m	TUOS $23.073 m	TUOS $0.644 m	TUOS $36.708 m	TUOS $33.024 m	TUOS $17.580 m	TUOS $6.835 m	TUOS $1.841 m	TUOS $5.094 m	TUOS $0.00 m

4.2.3. Demand, energy and customer forecasts

Aurora provided demand, energy consumption and customer number forecasts as a component of its regulatory proposal and revised regulatory proposal to the AER. Aurora has again prepared forecasts for demand, energy and customers as a component of its network tariff development modelling.

ACIL Tasman has been engaged by Aurora to provide energy consumption forecasts for this Initial Pricing Proposal.

ACIL Tasman's approach has been to estimate multiple regression models for each customer class against a set of drivers which differs for each class and validated using standard statistical tools. These drivers include economic growth (GSP), population growth, weather variation, customer prices and price elasticity of demand measures and annual rainfall (in the case of irrigation customers). In the case of GSP and population growth, conservative up-to-date forecasts have been used from reputable sources (Department of Treasury and Finance 2011-12 Budget Forecasts and Australian Bureau of Statistics Australian Demographic Statistics).

The revised energy consumption forecasts are the result of a continued decline in energy consumption by customers (primarily residential) during the 2011-12 financial year. This continued declining consumption is a result of the milder weather patterns over recent years impacting on the heating loads of customers, and a change in customer behaviour as a consequence of the increasing cost of electricity.

The 2012-13 energy consumption forecast provided in Aurora's Revised Regulatory Proposal was for a consumption of 4,356 GWh. The revised 2012-13 energy consumption forecast prepared by ACIL Tasman is for a consumption of 4,310 GWh. This consumption forecast is discussed in more detail in the paper 'IPP003 – ACIL Tasman Consumption Forecast' appended as an attachment to this Initial Pricing Proposal.

The demand forecasts prepared by Aurora as a component of its regulatory proposals 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 regulatory proposals 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 always avoid excess demand charges.

Customer numbers forecasts have been developed for this Initial 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 network and forecast for Aurora's regulatory proposals.

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 2010-11 and 2011-12 regulatory years by $49.86 million. This under-recovery has been included in Aurora's smoothed revenue allowance within the AER's distribution determination.

Given the low consumption again experienced during the 2011-12 year, Aurora has been conservative with its energy and customer forecasts for the 2012-13 year. The forecasts reflect the softening market seen in the recent 18 months and also accounts for the introduction of the carbon tax on 1 July 2012.

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 2012 if:

- they were an Aurora customer prior to 1 July 2012; and
- continue to be a customer of Aurora as at 1 July 2012.

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, or reassigned, 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[1]; 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 or reassigning 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 or a customer no longer has the same or materially similar load or connection characteristics as other customers on the customer's existing tariff class, then it may reassign that customer to another tariff class.

[1] The AER interprets 'nature' to include the installation of any technology capable of supporting time based tariffs.

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 reassignment.

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 to tariffs will be done as part of the next annual review of prices.

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 Initial 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 Guide, Metering Services Application and Price Guide, Public Lighting Application and Price Guide and Fee-based Services Application Guide.

These guides are included as an attachment to this Initial Pricing Proposal.

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 remained unchanged from those of the previous regulatory control period.

Table 4: Tariff classes – standard control services

Tariff class	Tariff	Description
ITC	Individual Tariff Calculation (ITC)	Individual Tariff Calculation (ITC) 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 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	HV kVA Demand (N10)	This network tariff is for customers taking high voltage supply. The customer must supply its own transformers and switchgear for installations connected on this network tariff. ***This network tariff is obsolete, with no new connections allowed.***
	HV kVA Specified Demand (N10s)	This network tariff is for customers where: • connection is made to this site at high voltage; and • the expected ATMD of the site is less than 2 MVA. 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
	HV kW Demand (N11)	This network tariff is for customers taking high voltage supply. The customer must supply its own transformers and switchgear for installations connected on this network tariff. ***This network tariff is obsolete, with no new connections allowed.***
	>2MVA (N15)	This network tariff is for customers where: • connection is made to this site at high voltage; and • the expected ATMD of the site is greater than 2 MVA. 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 tariff is not eligible for any other tariff.
Irrigation	LV Day/Night Irrigation (N08)	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. ***This network tariff is obsolete, with no new connections allowed.***
	LV Irrigation – TOU (N08a)	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.
Large LV	LV kW Demand (N03)	This network tariff is for installations taking low voltage 3-phase supply. ***This network tariff is obsolete, with no new connections allowed.***
	LV kVA Demand (N09)	This network tariff is for installations taking low voltage 3-phase supply.
Small LV	General Network – Business (N02)	This is the basic, low voltage network tariff for installations that are not private residential dwellings.
	General Network – Business, Nursing Homes (N02a)	This low voltage network tariff is applicable only to those businesses registered as aged care facilities. ***This network tariff is obsolete, with no new connections allowed.***

Tariff class	Tariff	Description
	General Network – Business, Curtilage (N02b)	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. ***This network tariff is obsolete, with no new connections allowed.***
	LV TOU – Business (N13b)	This is the basic, time of use low voltage network tariff for installations that are not private residential dwellings.
Residential	General Network – Residential (N01)	This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings.
	LV PAYG (N13)	This network tariff supports the *Aurora Pay As You Go* product offered by Aurora Retail, and is not to be used for any other application. This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings.
	LV TOU – Residential (N13r)	This network tariff is for low voltage installations that are premises used wholly or principally as private residential dwellings.
Uncontrolled Energy	Uncontrolled Energy (N05)	This network tariff is for low voltage installations. In installations that are private residential dwellings, this network tariff: • is for water heating and/or residential space heating and/or domestic indoor pool heating only. In installations that are not private residential dwellings, this network tariff: • is for water heating only.
Controlled Energy	Controlled Energy (N06)	This network tariff is for low voltage installations and includes an 'afternoon boost' component. In installations that are private residential dwellings, this network tariff: • is for water heating and/or residential space heating and/or other "wired in" appliances as approved by Aurora; and • 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. In installations that are not private residential dwellings, this network tariff: • is for water heating and/or space heating and/or other "wired in" appliances as approved by Aurora.

Tariff class	Tariff	Description
	LV Controlled Energy (N06a)	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: • is for water heating and/or residential space heating and/or other circuits as approved by Aurora; and • 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. In installations that are not private residential dwellings, this network tariff: • is for water heating and/or space heating and/or other circuits as approved by Aurora.
Unmetered	Small LV Unmetered (N07)	This network tariff is for small, low voltage, low demand installations with a relatively constant load profile. For example: • illuminated street signs; • public telephone kiosks; • electric fences; • two-way radio transmitters; • fixed steady wattage installations; • traffic lights; and • level crossings. 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.
Streetlights	Street Lighting (N20)	This network tariff is for customers that have a public lighting service provided by Aurora. This network tariff does not include charges for the installation and/or replacement of lamps. Costs for installation or replacement of lamps are an additional charge. These charges are included in the final public lighting tariff.
Embedded Generator	Import Energy (N21)	Network tariff 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. This network tariff is for those installations that import energy into the distribution system.

6.2. 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.

6.2.1. Recovery of DUoS

Network tariffs and charging parameters are designed to recover the approved revenue which is consistent with the calculation of the MAR as set out in the AER's distribution determination. The network charging parameters adopted by Aurora for the recovery of standard control services DUoS tariffs are detailed in Table 5.

Table 5: Tariff charging parameters for DUoS charges

	Tariff charging (Parameter)				
Tariff class	**Tariff**	**Daily charge** (c/day)	**Volume charge**[1] (c/kWh)	**Demand charge** (c/kVA(kW)/ day)	**Specified demand charge** (c/kVA/day)
ITC	ITC	✓	✓		✓
HV	N10	✓	✓	✓	
	N10s	✓	✓		✓
	N11	✓	✓	✓	
	N15	✓	✓		✓
Irrigation	N08	✓	✓		
	N08a	✓	✓		
Large LV	N03	✓	✓	✓	
	N09	✓	✓	✓	
Small LV	N02	✓	✓		
	N02a	✓	✓		
	N02b	✓	✓		
	N13b	✓	✓		
Residential	N01	✓	✓		
	N13	✓	✓		
	N13r	✓	✓		
Uncontrolled Energy	N05	✓	✓		
Controlled Energy	N06	✓	✓		
	N06a	✓	✓		
Unmetered	N07	✓	✓		
Street Lighting	N20		✓[2]		
Embedded Generation	N21	✓	✓		

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

2 Public lighting c/lamp watt/day.

6.2.2. 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 N15 network tariffs.

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

Table 6: Tariff charging parameters for TUoS charges

	Tariff charging (Parameter)				
Tariff class	**Tariff**	**Daily charge** (c/day)	**Volume charge**[1] (c/kWh)	**Demand charge** (c/kVA(kW)/ day)	**Specified demand charge** (c/kVA/day)
ITC	ITC				✓[2]
HV	N10		✓	✓	
	N10s		✓		✓
	N11		✓	✓	
	N15				✓[2]
Irrigation	N08		✓		
	N08a		✓		
Large LV	N03		✓	✓	
	N09		✓	✓	
Small LV	N02		✓		
	N02a		✓		
	N02b		✓		
	N13b		✓		
Residential	N01		✓		
	N13		✓		
	N13r		✓		
Uncontrolled Energy	N05		✓		

	Tariff charging (Parameter)				
Tariff class	**Tariff**	**Daily charge** (c/day)	**Volume charge**[1] (c/kWh)	**Demand charge** (c/kVA(kW)/ day)	**Specified demand charge** (c/kVA/day)
Controlled Energy	N06		✓		
	N06a		✓		
Unmetered	N07		✓		
Street Lighting	N20		✓[3]		
Embedded Generation	N21		✓		

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.

6.3. Tariffs

The proposed DUoS charges for each of Aurora's 2012-13 network tariffs are outlined in Table 7.

The proposed DUoS charges for each of Aurora's 2012-13 N15 and ITC[2] network tariffs are outlined in Table 8.

The proposed TUoS charges for each of Aurora's 2012-13 network tariffs are outlined in Table 9.

The proposed locational TUoS charges that are applicable to Aurora's 2012-13 ITC and N15 tariffs are outlined in Table 10.

[2] ITC tariff rates are confidential.

Table 7: Proposed tariffs for DUoS – standard control services

DUoS rates											
Network tariff	Tariff description	Daily charge c/day	ToU energy rate c/kWh			Step energy rates c/kWh		Step demand rates c/kVA(kW)/day		Capacity charges c/kVA/day	
			Peak	Shoulder	Off-peak	Step 1	Remaining	Step 1	Remaining	Specified	Excess
N01	General Network – Residential	38.131					10.443				
N02	General Network – Business	38.131					10.443				
N02a	General Network – Business, Nursing Homes	38.131				10.443	4.359				
N02b	General Network – Business, Curtilage	15.252					10.443				
N03	LV kW Demand	208.416					2.411		39.865		
N05	Uncontrolled Energy	4.129					1.890				
N06	Controlled Energy	7.740					0.801				
N06a	LV Controlled Energy	7.740					0.728				
N07	Small LV Unmetered	38.131					11.135				
N08	LV Day/Night Irrigation	183.236	10.443		0.728						
N08a	LV Irrigation – TOU	183.236	9.828	5.824	0.728						
N09	LV kVA Demand	186.086					1.929		27.493		
N10	HV kVA Demand	127.472					0.130		26.184		
N10s	HV kVA Specified Demand	127.472	0.198	0.158	0.053					19.819	198.190
N11	HV kW Demand	142.769					0.156		37.967		
N13	LV PAYG	38.131					5.001				
N13b	LV TOU – Business	38.131	9.158	5.678	0.728						
N13r	LV TOU – Business	38.131	8.594	5.320	0.728						
N20	Street Lighting								0.093		
N21	Import Energy										

Table 8: Proposed tariffs for DUoS – standard control services – N15 and ITC[3]

DUoS rates										
Network tariff	**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**
N15	HV kVA Specified Demand (> 2MVA)	1,725.700	1.557	0.422	0.053		0.359	1.795	9.891	49.455

[3] ITC tariff rates are confidential.

Table 9: Proposed tariffs for TUoS – standard control services

TUoS rates											
Network tariff	**Tariff description**	**Daily charge c/day**	**ToU energy rate c/kWh**			**Step energy rates c/kWh**		**Step demand rates c/kVA(kW)/day**		**Capacity charges c/kVA/day**	
			Peak	**Shoulder**	**Off-peak**	**Step 1**	**Remaining**	**Step 1**	**Remaining**	**Specified**	**Excess**
N01	General Network – Residential						4.035				
N02	General Network – Business						4.035				
N02a	General Network – Business, Nursing Homes					3.492	2.593				
N02b	General Network – Business, Curtilage						4.035				
N03	LV kW Demand						1.180		31.790		
N05	Uncontrolled Energy						2.474				
N06	Controlled Energy						0.723				
N06a	LV Controlled Energy						0.705				
N07	Small LV Unmetered						4.946				
N08	LV Day/Night Irrigation		4.514		0.705						
N08a	LV Irrigation – TOU		4.514	2.983	0.687						
N09	LV kVA Demand						0.944		21.924		
N10	HV kVA Demand						1.451		2.208		
N10s	HV kVA Specified Demand		1.306	1.042	0.645					1.657	16.570
N11	HV kW Demand						1.669		3.091		
N13	LV PAYG						2.501				
N13b	LV TOU – Business		4.237	2.831	0.684						
N13r	LV TOU – Residential		4.237	2.542	0.684						
N15	HV kVA Specified Demand (> 2MVA)									Locational	Locational
N20	Street Lighting								0.037		
N21	Import Energy										
ITC	Individual tariff calculation									Locational	Locational

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

Transmission node identifier	Transmission node description	Daily charge c/kVA/day
TAL2	Arthurs Lake	25.141
TAV2	Avoca	31.540
TBU3	Burnie	21.365
TBW2	Bridgewater	23.792
TCR2	Creek Road	21.062
TCS3	Chapel Street	23.013
TDB2	Derwent Bridge	442.421
TDE2	Derby	55.390
TDP2	Devonport	24.500
TEB2	Emu Bay	33.013
TEL2	Electrona	29.978
TGT3	George Town	23.868
THA3	Hadspen	20.428
TKE2	Kermandie	50.278
TKI2	Kingston	23.025
TKR2	Knights Road	29.680
TLF2	Lindisfarne	20.263
TMB2	Meadowbank	25.078
TMT2	Mornington	32.208
TMY2	Mowbray	22.985
TNH2	North Hobart	26.972
TNN2	New Norfolk	27.502
TNT2	Newton	47.886
TNW2	Norwood	21.119
TPL2	Port Latta	31.500
TPM3	Palmerston	29.031
TQT2	Queenstown	38.184
TRA2	Railton	24.752
TRB2	Rosebery	25.975
TRI4	Risdon	22.016
TRK2	Rokeby	35.237
TSD2	Scottsdale	61.597
TSL2	St Leonards	15.002
TSM2	St Marys	37.097
TSO2	Sorell	30.211
TSR2	Savage River	28.907
TST2	Smithton	34.390

Transmission node identifier	Transmission node description	Daily charge c/kVA/day
TTB2	Triabunna	49.914
TTR2	Trevallyn	20.859
TTU2	Tungatinah	85.481
TUL2	Ulverstone	24.106
TWA2	Waddamana	50.635
TWV2	Wesley Vale	83.123
TVN1	Hobart Virtual	23.545
TVN22	Tamar Virtual	20.645

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

Table 11: 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 12: 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 (non-standard) services.

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

Table 13: Tariff classes for alternative control services

Tariff Class	Definition
Metering	Metering services are those services provided with respect to the provision, installation and maintenance of standard meters and associated services provided to non-contestable customers. This includes the metering services provided using type 5 – 7 metering installations in Aurora's role as metering provider and meter data provider (MDP).
Public lighting	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.
Fee-based services	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.

Tariff Class	Definition
Quoted services	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. 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. Requests for quoted (non-standard) services may be received from a customer or retailer on behalf of a customer.

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 non-contestable customers 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 14.

Table 14: Meter classes for metering services

Meter Class	Definition
Domestic LV – single phase	Metering services provided to all non-contestable residential customers that are single phase.
Domestic LV – multi phase	Metering services provided to all non-contestable residential customers that are multiple phase.
Domestic LV – CT meters	Metering services provided to all non-contestable residential customers that require the installation of current or voltage transformers.
Domestic LV – single phase (remote read)	Metering services provided to all non-contestable 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)	Metering services provided to all non-contestable 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)	Metering services provided to all non-contestable 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	Metering services provided to all non-contestable commercial customers that are single phase.

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

7.2.2. Setting the 2012-13 metering services tariffs

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

The 2012-13 metering services tariffs and charging parameters set out in this Initial 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 15 provides details of the price cap calculation that Aurora has utilised in the preparation of its metering services tariffs.

Table 15: Price cap

Component	Value	Comment
P_{t-1}	Various	The price for each metering service as given in the AER's distribution determination.
ΔCPI_t	1.58%	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 2012-13 prices for each of Aurora's metering services tariffs are outlined in Table 16.

Table 16: Proposed tariffs for metering services

Tariff	Price (c/day)
Domestic LV – single phase	6.961
Domestic LV – multi phase	14.445
Domestic LV – CT meters	17.876
Domestic LV – single phase (remote read)	5.983
Domestic LV – multi phase (remote read)	13.531
Domestic LV – CT meters (remote read)	19.499
Business LV – single phase	7.200
Business LV – multi phase	14.403
Business LV – CT meters	18.625
Business LV – single phase (remote read)	5.983
Business LV – multi phase (remote read)	13.531
Domestic LV – CT meters (remote read)	19.499
Other meters (PAYG)	12.711

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 (non-standard) service;
- the installation of contract lights, which will be provided on a quoted service basis and is therefore categorised as a quoted (non-standard) service; and
- the provision of new public lighting technologies, which will be classified as a Negotiated Distribution Service.

Public lighting services were previously unregulated in Tasmania and OTTER have never regulated the provision of these services.

While Aurora has historically derived charges for the provision of public lighting services, the prices that Aurora has charged have not had any regulatory review or approval. 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 are referred to as contract lights.

7.3.2. Setting the 2012-13 public lighting services tariffs

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

The 2012-13 public lighting services tariffs and charging parameters set out in this Initial 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 17 provides details of the price cap calculation that Aurora has utilised in the preparation of its public lighting tariffs.

Table 17: Price cap

Component	Value	Comment
P_{t-1}	Various	The price for each public lighting service as given in the AER's distribution determination.
ΔCPI_t	1.58%	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.

7.3.3. Prices for public lighting services

The proposed 2012-13 prices for each of Aurora's public light tariffs are outlined in Table 18.

Table 18: Proposed tariffs for public lights

Lighting type	Price (c/day)
50W mercury vapour	33.065
80W mercury vapour – Aeroscreen	33.065
80W mercury vapour – Artcraft decorative	52.380
125W mercury vapour	38.073
250W mercury vapour	38.514
400W mercury vapour	42.789
70W sodium vapour	35.215
100W sodium vapour	35.477
150W sodium vapour	39.214
250W sodium vapour	39.334
400W sodium vapour	39.530
150W metal halide	39.214
250W metal halide	39.334
2 x 20W fluorescent	36.953
2 x 40W fluorescent	36.701
42W compact fluorescent	35.159
60W incandescent	32.454

The proposed 2012-13 prices for each of Aurora's contract light tariffs are outlined in Table 19.

Table 19: Proposed tariffs for contract lights

Lighting type	Price (c/day)
50W mercury vapour	22.587
80W mercury vapour	22.576
125W mercury vapour	23.592
250W mercury vapour	23.662
400W mercury vapour	23.715
70W sodium vapour	22.766
150W sodium vapour	24.280
250W sodium vapour	24.247
400W sodium vapour	24.318
150W metal halide	24.280
250W metal halide	24.247
400W metal halide	24.247
1 x 20W fluorescent	22.639
2 x 20W fluorescent	22.754
1 x 40W fluorescent	22.647
2 x 40W fluorescent	23.771
3 x 40W fluorescent	23.893
4 x 40W fluorescent	24.694
60W incandescent	22.574
100W incandescent	23.577
Pole surcharge	20.715

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;
- new connection – permanent supply;
- 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.

7.4.2. Setting the 2012-13 fee-based services tariffs

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

The 2012-13 fee-based services tariffs and charging parameters set out in this Initial 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 20 provides details of the price cap calculation that Aurora has utilised in the preparation of its fee-based services tariffs.

Table 20: Price cap

Component	Value	Comment
P_{t-1}	Various	The price for each fee-based service as given in the AER's distribution determination.
ΔCPI_t	1.58%	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.

7.4.3. Prices for fee-based services

The proposed 2012-13 prices for each of Aurora's fee-based services tariffs are outlined in Table 21.

Table 21: Proposed tariffs for fee-based services

Service	Price ($)
De-energisation, re-energisation and special reads	
Site visit – no appointment	52.74
Site visit – non scheduled visit	118.89
Site visit – same day premium service	307.13
Site visit – after hours	792.59
Site visit – credit action or site issues	77.30
Site visit – rectification of illegal connection	241.05
Site visit – interval metering	59.43
Meter alteration	
Tariff alteration – single phase	176.77
Tariff alteration – three phase	241.05
Adjust time clock	57.85
Install pulse outputs	160.70
Remove meter	267.19
Meter alteration – after hours visit	771.36
Meter alteration – wasted visit	96.42
Meter test	
Meter test – single phase	289.26
Meter test – multi phase	578.52
Meter test – CT	642.80
Meter test – after hours	771.36
Meter test –wasted visit	96.42
Supply establishment	
New connection – after hours	771.36
Install additional service span – single phase	427.05
Install additional service span – single phase-additional spans	320.18
Install additional service span – multiple phase	605.97
Install additional service span – multiple phase-additional spans	499.08
New connection-wasted visit	96.42
Supply abolishment	
Remove service & meters	267.19

Service	Price ($)
Supply abolishment – after hours	771.36
Supply abolishment – wasted visit	160.31
Renewable energy connection	
Renewable energy connection	176.77
Renewable energy connection – after hours	1,389.40
Renewable energy connection – wasted visit	160.31
Temporary builders connection	
Temporary supply underground – single phase – temporary position	192.84
Temporary supply underground – three phase – temporary position	288.52
Temporary supply underground – single phase – permanent position	288.52
Temporary supply underground – three phase – permanent position	288.52
Temporary supply overhead – single phase – temporary position	533.93
Temporary supply overhead – three phase – temporary position	712.84
Temporary supply overhead – single phase – permanent position	533.93
Temporary supply overhead – three phase – permanent position	712.84
Temporary supply – after hours	1,389.40
Temporary supply – wasted visit	160.31
Temporary show and carnival connection	
Temporary supply – underground	321.40
Temporary supply – overhead mains	402.70
Temporary supply – overhead service	829.44
Temporary supply – after hours	771.36
Temporary supply – wasted visit	160.31
Truck tee-up	
Tee-up – initial 30 minutes	128.29
Tee-up – each additional 15 minutes	52.72
Tee-up – after hours	1,441.50
Tee-up – no truck – after hours	1,282.53
Tee-up – wasted visit	160.31
Miscellaneous services	
Open turret	144.63
Addition/alteration to connection point	321.40
Connection of new mains to existing installation	224.98

Service	Price ($)
Data download	321.40
Alteration to unmetered supply	241.05
Miscellaneous service	128.56
Miscellaneous service – after hours	771.36
Miscellaneous service – wasted visit	160.31

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 2012-13 quoted services tariffs

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

The 2012-13 quoted services tariffs and charging parameters set out in this Initial 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:

$$P = \Sigma_i (Units_i \times LR_i) + Materials + Contractors + Other\ Costs + Overheads$$

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 Initial 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:

$$LR_i = LR_{t-1} \times (1 + \Delta CPI_t)$$

Table 22 provides details of the labour rate cap calculation that Aurora has utilised in the preparation of its quoted services tariffs.

Table 22: Price cap

Component	Value	Comment
LR_{t-1}	Various	The price for each quoted service labour rate as given in the AER's distribution determination.
ΔCPI_t	1.58%	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.

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 2012-13 prices for each of Aurora's quoted services tariffs are outlined in Table 23.

Table 23: Proposed tariffs for quoted services

Labour	Price ($)
Apprentice	78.57
Cable jointer	60.43
Customer connections – commercial metering	67.76
Customer connections – service crew	61.02
Designer	75.91
Distribution electrical technician	60.80
Distribution linesman	55.55
Distribution linesman – live line	60.59
Distribution operator	65.60
Electrical inspector	64.70
Field service co-ordinator	84.76
Labourer – overhead	51.06
Meter reader	46.52
Pole tester	50.74
Project manager	76.06

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 Initial 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.

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 2012-13. 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 2012-13, in line with the methodology set out in this Initial Pricing Proposal.

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

8.1.1. Variations between the regulatory years 2011-12 and 2012-13

Due to the carry forward of adjustments from the previous regulatory control period, Aurora's total revenue has increased by approximately 6 per cent between 2011-12 and 2012-13, while its customer load is expected to decrease by only around 5 per cent.

To meet this increase in revenue, Aurora has adopted the following general strategies for its network tariffs for 2012-13. In a number of instances these strategies have remained unchanged from the previous regulatory period. These tariff strategies are:

- the majority of customers will see an increase of no greater than CPI 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 7 per cent and total TUoS revenue by approximately 3 per cent, individual DUoS and TUoS network tariff components will vary by differing amounts;
- residential and business customers will no longer receive declining block energy or demand components within network tariffs as the incentives to give discounts for larger consumption are unwound as part of demand management strategies;
- 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 2012-13 regulatory year, the nursing home network tariff will be increased by CPI + 6 per cent, as previously agreed with OTTER, until parity with the General Network – Business network tariff rate is reached, at which time the nursing home network tariff will be discontinued; and
- rebalancing to ensure appropriate revenues will be applied to "fine tune" the revenue recovery.

8.1.2. Reallocation between fixed and variable costs

The principles of allocation between fixed and variable costs remain consistent with the previous regulatory period. 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 CPI. Customers on network tariff N02b 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.

8.1.3. Rebalancing of DUoS and TUoS revenues

Aurora anticipates an under recovery of total revenue from its tariffs in 2011-12, 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 MAR allowable to Aurora inclusive of the anticipated under recovery.

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 Initial Pricing Proposal have been designed with this approach. To comply with the Rules, information reported as part of this Initial 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 no 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 6.2.2.

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 24 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 24: TUoS unders and overs account

($million)	year t-2 (actual)	year t-1 (estimate)	year t (forecast)
Revenue from TUoS charges			126.086
Less total transmission related payments			126.086
Transmission charges to be paid to TNSP			126.086
Avoided TUoS payments			
Under/over recovery for regulatory year			
TUoS under and overs account			
Nominal WACC	8.28%	8.28%	n/a
Opening balance			
Interest on opening balance			
Under/over recovery for regulatory year			
Interest on under/over recovery for regulatory year			
Closing balance			

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 25 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 25: DUoS unders and overs account

($million)	year t-2 (actual)	year t-1 (estimate)	year t (forecast)
Revenue from DUoS charges			276.400
Less MAR for the relevant year			276.400
Allowed revenue (AR_t)			276.400
Transitional ($transitional_t$)			
Electrical safety inspection service adjustment ($ESISC_t$)			
National energy market charge adjustment ($NEMC_t$)			
Approved pass throughs ($Passthrough_t$)			
Under/over recovery for regulatory year			
DUoS under and overs account			
Nominal WACC	8.28%	8.28%	n/a
Opening balance			
Interest on opening balance			
Under/over recovery for regulatory year			
Interest on under/over recovery for regulatory year			
Closing balance			

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

Standard control services

Aurora has estimated the stand-alone costs for each tariff class by calculating the total annual costs of operating its network less the avoidable costs of serving other tariff classes. This approach uses the total ARR 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 pricing proposal, DCoS allocates the building block components of the ARR 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.

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 2012-13 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.

10.2.5. Standard control services

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 26. The table shows the stand-alone and avoidable costs for each network tariff, compared to the expected revenue from network tariffs.

Table 26: Stand-alone and avoidable cost boundaries

Tariff class	Tariff	Avoidable cost ($m)	Expected revenue ($m) ex side constraint adjustment	Stand-alone cost ($m)
ITC	Individual Tariff Calculation (ITC)	0.09	1.59	205.31
HV	>2MVA (N15)	0.07	3.34	205.29
	HV kVA Demand (N10)	0.08	4.78	205.30
	HV kVA Specified Demand (N10s)	0.05	1.43	205.28
	HV kW Demand (N11)	0.00	0.02	205.23
Irrigation	LV Day/Night Irrigation (N08)	0.35	3.91	205.57
	LV Irrigation – TOU (N08a)	0.09	2.31	205.31
Large LV	LV kW Demand (N03)	0.04	0.66	205.26
	LV kVA Demand (N09)	0.28	25.97	205.51
Small LV	General Network – Business (N02)	1.78	56.21	207.01
	General Network – Business, Nursing Homes (N02a)	0.12	1.67	205.34
	General Network – Business, Curtilage (N02b)	0.20	3.67	205.42
	LV TOU – Business (N13b)	0.89	22.43	206.12
Residential	General Network – Residential (N01)	8.89	106.87	214.11
	LV PAYG (N13)	0.21	15.43	205.43
	LV TOU – Residential (N13r)	0.01	0.95	205.23

Tariff class	Tariff	Avoidable cost ($m)	Expected revenue ($m) ex side constraint adjustment	Stand-alone cost ($m)
Uncontrolled Energy	Uncontrolled Energy (N05)	0.00	20.35	205.22
Controlled Energy	Controlled Energy (N06)	0.00	1.57	205.22
	LV Controlled Energy (N06a)	0.00	0.00	205.22
Unmetered	Small LV Unmetered (N07)	0.00	1.04	205.23
Streetlights	Street Lighting (N20)	0.00	2.20	205.23
Embedded Generator	Import Energy (N21)	0.00	0.00	205.22

The outcomes of Aurora's cost and pricing models are also set out in Table 27. 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 27: Stand-alone and avoidable cost boundaries

Tariff class	Avoidable cost ($m)	Expected revenue ($m) ex side constraint adjustment	Stand-alone cost ($m)
ITC	0.09	1.59	205.31
HV	0.20	9.56	205.43
Irrigation	0.44	6.21	205.66
Large LV	0.32	26.62	205.54
Small LV	2.99	83.98	208.21
Residential	9.10	123.25	214.32
Uncontrolled Energy	0.00	20.35	205.22
Controlled Energy	0.00	1.58	205.22
Unmetered	0.00	1.04	205.23
Streetlights	0.01	2.20	205.23
Embedded Generation	0.00	0.00	205.22

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 period 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 ARR 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:

$$\frac{\sum_{j-1}^{m} d\frac{j}{t} \times q\frac{j}{t}}{\sum_{j-1}^{m} d\frac{j}{t-1} \times q\frac{j}{t}} \leq= (1 + \Delta CPI_t) \times (1 - X_t) \times (1 + 2\%) \times (1 - S_t) \pm passthrough_t \pm ESISC_t \pm NEMC_t \pm DUOS_t \pm transitional_t$$

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

- $d^{j}/_{t}$ is the proposed price for component 'j' of the tariff class for year t.
- $d^{j}/_{t-1}$ is the price charged by the DNSP for component 'j' of the tariff class in year t–1.
- $q^{j}/_{t}$ is the forecast quantity of component 'j'of the tariff class in year t.
- ΔCPI_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.
- $passthrough_t$ 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 adjustments 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.

Regulatory years are defined in Chapter 10 of the Rules as "each consecutive period of twelve calendar months in a regulatory control period, the first such twelve month period commencing at the beginning of the regulatory control period and the final twelve month period ending at the end of the regulatory control period".

This means that side constraints are not applied between regulatory control periods, and therefore that side constraints will be applied starting from the second regulatory year of the regulatory control period. Side constraints do not, therefore, apply to Aurora's tariff classes in 2012-13.

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 28 provides the difference in the charges between 2011-12 and 2012-13 for each ITC[4] network tariff. This table is used to give an estimate of the percentage component change for each customer.

Table 28: Estimated percentage price change by ITC tariff 2011-12 to 2012-13

Tariff class	NMI		DUoS charge 2011-12 (cents)	DUoS charge 2012-13 (cents)	Change (%)

[4] ITC tariff rates are confidential.

Tariff class	NMI		DUoS charge 2011-12 (cents)	DUoS charge 2012-13 (cents)	Change (%)

Table 29 provides the difference in the charges between 2011-12 and 2012-13 for each network tariff. This table is used to give an estimate of the percentage component change for each customer.

Table 29: Estimated percentage price change by tariff class 2011-12 to 2012-13

Tariff class	Tariff		NUos charge 2011-12 (cents)	NUoS charge 2012-13 (cents)	Change (%)
HV	N15	Daily	1,698.900	1,725.700	1.58
		Peak energy	1.428	1.557	9.03
		Shoulder energy	0.387	0.422	9.04
		Off-peak energy	0.049	0.053	8.16
		Specified demand	9.074	9.891	9.00
		Excess demand	45.370	49.455	9.00
		Specified connection	0.329	0.359	9.12
		Excess connection	1.645	1.795	9.12
	N10	Daily	125.489	127.472	1.58
		Energy	1.517	1.581	4.22
		Demand	26.386	28.392	7.60
	N10s	Daily	125.489	127.472	1.58
		Peak energy	1.366	1.504	10.10
		Shoulder energy	1.090	1.200	10.09
		Off-peak energy	0.675	0.698	3.41
		Specified demand	19.790	21.476	8.52
		Excess demand	197.900	214.760	8.52
	N11	Daily	140.548	142.769	1.58
		Energy	1.699	1.825	7.42

Tariff class	Tariff		NUos charge 2011-12 (cents)	NUoS charge 2012-13 (cents)	Change (%)
		Demand	34.767	41.058	18.09
Irrigation	N08	Daily	180.386	183.236	1.58
		Day energy	13.141	14.957	13.82
		Night energy	1.102	1.433	30.04
	N08a/N08b	Daily	163.046	183.236	12.38
		Peak energy	13.141	14.342	9.14
		Shoulder energy	8.314	8.807	5.93
		Off-peak energy	1.075	1.415	31.63
Large LV	N03	Daily	205.175	208.416	1.58
		Energy	3.012	3.591	19.22
		1st 250 kW demand	62.916	71.655	13.89
		Remaining demand	56.709	71.655	26.36
	N09	Daily	183.192	186.086	1.58
		Energy	2.690	2.873	6.80
		1st 250 kVA demand	47.749	49.417	3.49
		Remaining demand	43.038	49.417	14.82
Small LV	N02	Daily	37.538	38.131	1.58
		1st 500kWh energy	12.897	14.478	12.26
		Remaining energy	12.574	14.478	15.14
	N02a	Daily	37.538	38.131	1.58
		1st 500kWh energy	12.229	13.935	13.95
		Remaining energy	6.462	6.952	7.58
	N02b	Daily charge	11.261	15.252	35.44
		1st 500kWh energy	12.897	14.478	12.26
		Remaining energy	12.574	14.478	15.14
	N13b/N13c	Daily	37.538	38.131	1.58
		Peak energy	12.736	13.395	5.17
		Shoulder energy	8.182	8.509	4.00
		Off-peak energy	1.102	1.412	28.13
Residential	N01	Daily	37.538	38.131	1.58
		1st 500kWh energy	12.897	14.478	12.26
		Remaining energy	12.574	14.478	15.14
	N13	Daily	37.538	38.131	1.58
		Energy charge	7.471	7.502	0.40
	N13r	Daily charge	37.538	38.131	1.58
		Peak energy	12.519	12.831	2.49

Tariff class	Tariff		NUos charge 2011-12 (cents)	NUoS charge 2012-13 (cents)	Change (%)
		Shoulder energy	7.936	7.862	-0.93
		Off-peak energy	1.102	1.412	28.13
Uncontrolled Energy	N05	Daily	3.754	4.129	9.99
		Energy	4.027	4.364	8.36
Controlled Energy	N06	Daily	7.371	7.740	5.01
		Energy	1.129	1.524	34.99
	N06a	Daily	7.371	7.740	5.01
		Energy	1.102	1.433	30.04
Unmetered	N07	Daily	28.153	38.131	35.44
		Energy	15.037	16.081	6.94
Streetlights	N20	Demand	0.123	0.130	5.69

Aurora has also completed an analysis of typical customer bill impacts and includes this analysis as an attachment to this Initial Pricing Proposal.

11.1.2. Alternative control services

The price changes between 2011-12 and 2012-13 for alternative control services are provided in the following tables.

Metering services

Aurora's metering charges were not previously classified by OTTER in the same manner as that determined by the AER and Aurora is therefore not able to provide a direct comparison of the prices for the provision of metering services.

Public lighting services

Table 30 provides the difference in the charges between 2011-12 and 2012-13 for the provision of public lighting services.

Table 30: Estimated percentage price change 2011-12 to 2012-13

Tariff	Price 2011-12 (c/day)	Price 2012-13 (c/day)	Percentage change (%)
50W mercury vapour	30.251	33.065	9.30
80W mercury vapour – Aeroscreen	29.787	33.065	11.00
80W mercury vapour – Artcraft decorative	53.270	52.380	-1.67
125W mercury vapour	35.842	38.073	6.22
250W mercury vapour	28.350	38.514	35.85
400W mercury vapour	0.481	42.789	8,789.84
70W sodium vapour	33.098	35.215	6.40
100W sodium vapour	36.546	35.477	-2.93

Tariff	Price 2011-12 (c/day)	Price 2012-13 (c/day)	Percentage change (%)
150W sodium vapour	38.699	39.214	1.33
250W sodium vapour	38.770	39.334	1.45
400W sodium vapour	11.852	39.530	233.53
150W metal halide	43.650	39.214	-10.16
250W metal halide	42.156	39.334	-6.69
2 x 20W fluorescent	36.142	36.953	2.24
2 x 40W fluorescent	36.142	36.701	1.55
42W compact fluorescent	33.970	35.159	3.50
60W incandescent	44.443	32.454	-26.98

Table 31 provides the difference in the charges between 2011-12 and 2012-13 for the provision of contract lighting services.

Table 31: Estimated percentage price change 2011-12 to 2012-13

Tariff	Price 2011-12 (c/day)	Price 2012-13 (c/day)	Percentage change (%)
50W mercury vapour	27.137	22.587	-16.77
80W mercury vapour	27.996	22.576	-19.36
125W mercury vapour	42.683	23.592	-44.73
250W mercury vapour	68.487	23.662	-65.45
400W mercury vapour	103.071	23.715	-76.99
70W sodium vapour	40.829	22.766	-44.24
150W sodium vapour	49.783	24.280	-51.23
250W sodium vapour	68.162	24.247	-64.43
400W sodium vapour	104.494	24.318	-76.73
150W metal halide	62.043	24.280	-60.87
250W metal halide	76.686	24.247	-68.38
400W metal halide	96.084	24.247	-74.76
1 x 20W fluorescent	15.467	22.639	46.37
2 x 20W fluorescent	24.713	22.754	-7.93
1 x 40W fluorescent	20.418	22.647	10.91
2 x 40W fluorescent	29.807	23.771	-20.25
3 x 40W fluorescent	42.345	23.893	-43.58
4 x 40W fluorescent	45.117	24.694	-45.27
60W incandescent	46.380	22.574	-51.33
100W incandescent	60.565	23.577	-61.07

Tariff	Price 2011-12 (c/day)	Price 2012-13 (c/day)	Percentage change (%)
Pole surcharge	27.164	20.715	-23.74

Fee-based services

Aurora did not provide the full range of fee-based services during the previous regulatory period and Aurora is therefore unable to provide a full comparison of the rates for the provision of all fee-based services.

Table 32 provides the difference in the charges between 2011-12 and 2012-13 for the provision of fee-based services.

Table 32: Estimated percentage price change 2011-12 to 2012-13

Tariff	Price 2011-12 ($)	Price 2012-13 ($)	Percentage change (%)
De-energisation, re-energisation and special reads			
Site visit – no appointment	35.20	52.74	49.83
Site visit – non scheduled visit	124.75	118.89	-4.70
Site visit – same day premium service	236.05	307.13	30.11
Site visit – after hours		792.59	
Site visit – credit action or site issues		77.30	
Site visit – rectification of illegal connection	313.45	241.05	-23.10
Site visit – interval metering		59.43	
Meter alteration			
Tariff alteration – single phase	146.15	176.77	20.95
Tariff alteration – three phase	169.45	241.05	42.25
Adjust time clock	95.40	57.85	-39.36
Install pulse outputs		160.70	
Remove meter		267.19	
Meter alteration – after hours visit		771.36	
Meter alteration – wasted visit	79.40	96.42	21.44
Meter test			
Meter test – single phase	214.65	289.26	34.76
Meter test – multi phase	429.20	578.52	34.79
Meter test – CT	345.75	642.80	85.91
Meter test – after hours		771.36	
Meter test –wasted visit	79.40	96.42	21.44
Supply establishment			
New connection – after hours		771.36	

Tariff	Price 2011-12 ($)	Price 2012-13 ($)	Percentage change (%)
Install additional service span – single phase	375.95	427.05	13.59
Install additional service span – single phase-additional spans		320.18	
Install additional service span – multiple phase	534.80	605.97	13.31
Install additional service span – multiple phase-additional spans		499.08	
New connection-wasted visit	134.50	96.42	-28.31
Supply abolishment			
Remove service & meters	248.35	267.19	7.59
Supply abolishment – after hours		771.36	
Supply abolishment – wasted visit	134.50	160.31	19.19
Renewable energy connection			
Renewable energy connection	146.15	176.77	20.95
Renewable energy connection – after hours		1,389.40	
Renewable energy connection – wasted visit	79.45	160.31	101.77
Temporary builders connection			
Temporary supply underground – single phase – temporary position	146.15	192.84	31.95
Temporary supply underground – three phase – temporary position	169.45	288.52	70.27
Temporary supply underground – single phase – permanent position	146.15	288.52	97.41
Temporary supply underground – three phase – permanent position	169.45	288.52	70.27
Temporary supply overhead – single phase – temporary position	501.80	533.93	6.40
Temporary supply overhead – three phase – temporary position	665.05	712.84	7.19
Temporary supply overhead – single phase – permanent position	355.65	533.93	50.13
Temporary supply overhead – three phase – permanent position	495.60	712.84	43.83
Temporary supply – after hours		1,389.40	
Temporary supply – wasted visit	134.50	160.31	19.19
Temporary show and carnival connection			

Tariff	Price 2011-12 ($)	Price 2012-13 ($)	Percentage change (%)
Temporary supply – underground	146.15	321.40	119.91
Temporary supply – overhead mains	348.95	402.70	15.40
Temporary supply – overhead service	501.80	829.44	65.29
Temporary supply – after hours		771.36	
Temporary supply – wasted visit	134.50	160.31	19.19
Truck tee-up			
Tee-up – initial 30 minutes		128.29	
Tee-up – each additional 15 minutes		52.72	
Tee-up – after hours	1,582.30	1,441.50	-8.90
Tee-up – no truck – after hours		1,282.53	
Tee-up – wasted visit	134.50	160.31	19.19
Miscellaneous services			
Open turret	110.40	144.63	31.01
Addition/alteration to connection point	267.45	321.40	20.17
Connection of new mains to existing installation		224.98	
Data download		321.40	
Alteration to unmetered supply		241.05	
Miscellaneous service		128.56	
Miscellaneous service – after hours		771.36	
Miscellaneous service – wasted visit	79.45	160.31	101.77

Quoted services

Aurora did not provide quoted services during the previous regulatory period and Aurora is therefore unable to provide a comparison of the labour rates for the provision of quoted services.

12. Tariff development

There will be no change to the existing network tariff structure during the first regulatory year of the 2012-17 regulatory control period.

Aurora has previously highlighted network tariff structures and proposed changes within its annual pricing proposals. Various network tariffs have been made obsolete or under an arrangement which is discussed in the Network Tariff Application Guide and the alternative tariffs for customers to transition over time.

There will be no change to this process within the 2012-2013 regulatory year.

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 IBM confirming that Aurora has completed this Initial 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 Initial 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 Initial Pricing Proposal or any attachment, Aurora has redacted those confidential parts and provides a 'public' version of the Initial Pricing Proposal or the attachment. Where Aurora considers that an entire attachment should remain confidential it has not provided a 'public' version.

Table 33: Confidential information

Reference	Title
Initial Pricing Proposal – Table 8	Proposed tariffs for DUoS – standard control services – N15 and ITC
Initial Pricing Proposal – Table 28	Estimated percentage price change by ITC tariff 2011-12 to 2012-13
IPP011	Aurora DCoS Model
IPP012	Aurora DCoS to Tariff Model
IPP013	AER Tariff Reconciliation Model

15. Attachments

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

Table 34: Attachments

No	Title
IPP001	DCoS Methodology
IPP002	DCoS to Tariff Methodology
IPP003	ACIL Tasman Consumption Forecast
IPP004	Network Tariff Application Guide
IPP005	Network Tariff Price Guide
IPP006	Metering Services Application and Price Guide
IPP007	Public Lighting Application and Price Guide
IPP008	Fee-based Services Application Guide
IPP009	Fee-based Services Price Guide
IPP010	Quoted Services Application and Price Guide
IPP011	Aurora DCoS Model[5]
IPP012	Aurora DCoS to Tariff Model[2]
IPP013	AER Tariff Reconciliation Model[2]
IPP014	IBM Audit Certification
IPP015	Typical Customer Analysis

[5] These documents are confidential

16. Listing of figures and tables

16.1. Figures within this Initial Pricing Proposal

16.2. Tables within this Initial Pricing Proposal

17. Glossary of terms/abbreviations

Term	Definition
ABS	Australian Bureau of Statistics
ACIL Tasman	ACIL Tasman Pty Ltd
AER	Australian Energy Regulator
ARR	Annual Revenue Requirement
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
ESI Act	*Electricity Supply Industry Act 1995*
ESIA Act	*Electricity Supply Industry Administration Act 2007*
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
NEL	National Electricity Law
NEM	National Electricity Market

Term	Definition
NER or Rules	National Electricity Rules
NEMC	National Energy Market Charge
NUOS	The tariff for use of the distribution and transmission networks. It is the sum of both Distribution Use of System and Designated Pricing Proposal Charges.
NPV	Net Present Value
OH	Overhead
Ombudsman Act	*Energy Ombudsman Act 1998*
OTTER	Office of the Tasmanian Economic Regulator
PAYG	The Aurora's energy business Pay As You Go package offered to electricity customers
Price Control Regulations	*Electricity Supply Industry (Price Control) Regulations 2003*
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 *Economic Regulator Act 2009*
Smart meter	An electrical meter that records consumption in intervals of 30 minutes or less and communicates that information back to Aurora.
TEC	Tasmanian Electricity Code
TMR	Trunk Mobile Radio
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

Energy consumption forecasts

In its Revised Regulatory Proposal, Aurora utilised energy consumption forecasts which were developed by ACIL Tasman (ACIL) in January 2012. Aurora also advised the AER that an updated forecast report would be prepared using more recent consumption data closer to the submission of its Initial Pricing Proposal for the regulatory year 2012-13.

The report has been developed in line with clause 6.18.8 of the NER. Clause 6.18.8 states, in part:

> *6.18.8 Approval of pricing proposal*
>
> *(a) 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.*

Utilising consumption data from January 2012 to March 2012, ACIL has prepared an updated energy consumption forecast for 2012-13 of 4,377 GWh. This is presented in ACIL's latest April 2012 report (attached). The ACIL January 2012 report previously provided to the AER, as a component of Aurora's Revised Regulatory Proposal, had an energy forecast for the 2012-13 regulatory year totalling 4,355 GWh.

The estimate for total 2011-12 consumption, as outlined in the April ACIL report, is 4,334 GWh. ACIL is therefore forecasting an increase in total energy consumption for the 2012-13 regulatory year of 43 GWh.

In light of the declines in consumption seen over the past few years in Tasmania and given the potential for an outsized consumer response to forthcoming price rises under a carbon tax, Aurora considered it was reasonable to consider an alternative scenario.

At the request of Aurora, ACIL Tasman presented an alternative scenario (section 7.4 of the ACIL April 2012 report), that results in a lower energy forecast of 4,310 GWh. This alternative scenario was based upon a 25 per cent price impact at the final consumer price level and the use of consumption data to December 2012. The 25 per cent price rise was used as a proxy to capture a number of uncertainties impacting on consumption (detailed further below).

Consumption data to December 2011 was used in the ACIL modelling, as there was an upward impact from the inclusion of the recent January 2012 to March 2012 data (which was consistent with 5 year consumption averages – unlike the significantly below average consumption seen from July 2011 to December 2011). The January to March months are of low energy consumption in Tasmania and exhibit the least variability (i.e. the residential load in summer largely consists of hot water and light and power – over which there is limited ability for a discretionary consumption response - unlike in winter, where there is a significant heating load). It is notable that the most recent consumption data for April 2012 was 5 per cent below that recorded in April the previous year.

Further considerations that have been incorporated for the Aurora scenario include:

- while still uncertain and dependent on a number of external factors, price rises on 1 July 2012 are likely to be higher than ever seen before in Tasmania and it would be reasonable to expect price elasticity estimates to have changed since the (most recent) 2007 NIEIR national estimates (as used in the ACIL model);
- weather for two of past three years (2009-10 and 2011-12) has been milder and therefore lower than the long-term trend. ACIL's forecasts assume weather returns to the long term trend;
- Aurora has consistently over-estimated consumption over this current regulatory control period. This has led to under recoveries and higher than forecast price rises in following years;
- recent Tasmanian economic data, e.g. unemployment rate, is weaker than may have been anticipated, so there is some potential downside risk to the Tasmanian Treasury GSP forecasts utilised by ACIL. Indeed, the 2012-13 budget released by the Tasmanian Government on 17 May revised down GSP for 2012-13 by 0.5 per cent to 1.25 per cent;
- total consumption in Tasmania has now fallen by around 90 GWh on average every year since 2008-09; and
- while the Aurora scenario produces lower consumption forecasts, the difference between the ACIL forecast for 2012-13 and the Aurora scenario is 67 GWh. This represents a difference of 1.5 per cent and is a relatively modest reduction in the context of declines seen in recent years. Further, consumption is only 25 GWh or 0.6 per cent lower than the forecast 2011-12 consumption.

The use of the Aurora scenario is not intended to throw doubt on the validity of the independent ACIL forecasts which are based on well constructed and justifiable econometric modelling, using published official data and long term trends. However, forecasting the behaviour of every household and business is inherently uncertain. This is an issue for any macroeconomic modelling, be it State/Commonwealth Treasuries forecasting economic growth, or the RBA forecasting inflation, and judgement is often overlaid on model forecasts before arriving at an outcome.

Examples of future uncertainty in energy consumption modelling would be attempting to assess the impact of consumer substitution towards other energy sources in Tasmania (eg solar, wood-fired heating or gas) or the impact of new demand-side participation measures. It should also be noted that Aurora's energy consumption modelling will be continually revised to improve their performance going forward. The current model and inputs are unlikely to be the same in coming years.

As opposed to arbitrarily changing the NIEIR elasticity estimates, official GSP forecasts, weather trends, or other model inputs, Aurora's scenario simply uses actual consumption data to December 2012 and a significant price rise for next financial year (although within the range of possible future price outcomes) as a proxy for changes to these other difficult-to-quantify inputs.

In the preparation of its Pricing Proposal, Aurora's preference is the use of the alternative scenario, which shows modest declines in total and residential energy consumption in Tasmania in the 2012-13 regulatory year. Aurora believes, based on the information above, that this energy consumption forecast is 'reasonable'.