

# Initial Pricing Proposal

For the Financial Year ending June 2016

May 2015

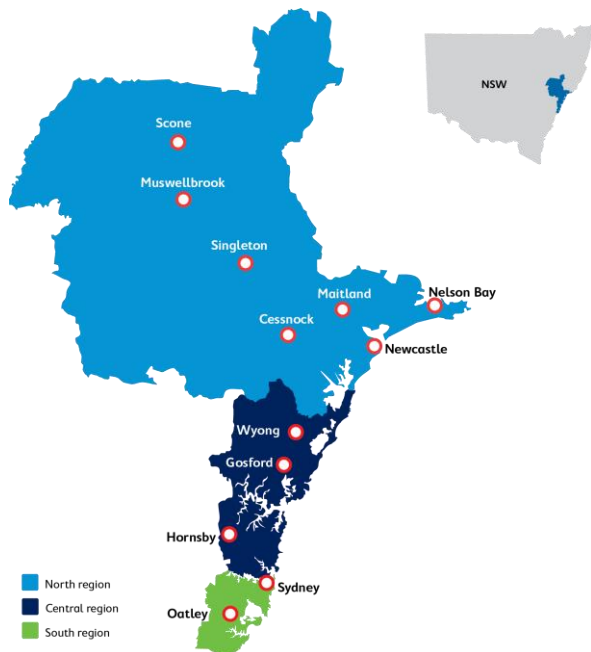


## Contents

1	INTRODUCTION.....	3
2	OVERVIEW .....	5
3	NETWORK TARIFF CLASSES.....	7
4	PROPOSED INTERIM TARIFFS AND CHARGING PARAMETERS .....	10
5	WEIGHTED AVERAGE REVENUE .....	18
6	VARIATIONS TO TARIFFS.....	21
7	CLIMATE CHANGE FUND .....	22
8	DESIGNATED PRICING PROPOSAL CHARGES .....	23
9	DISTRIBUTION USE OF SYSTEM UNDERS AND OVERS ACCOUNT.....	26
10	CHANGES FROM THE PREVIOUS REGULATORY YEAR.....	27
11	PROPOSED NEW NETWORK TARIFFS .....	28
12	ANNUAL SYSTEM OF ASSESSMENT AND REVIEW OF TARIFFS.....	29
13	D-FACTOR.....	32
14	PUBLIC LIGHTING .....	33
15	ANCILLARY NETWORK SERVICES.....	34
16	TYPE 5 AND 6 METERING CHARGES.....	36
17	ATTACHMENTS .....	38

# 1 Introduction

Ausgrid is responsible for building, operating and maintaining the electricity network that provides power to more than 1.6 million customers across Sydney, the Central Coast and the Hunter. Its distribution and transmission services are subject to price regulation, which is overseen by the Australian Energy Regulator (AER).



The AER is responsible for regulating the revenues of all distribution and transmission network service providers in the National Electricity Market, in accordance with the National Electricity Law (NEL) and the National Electricity Rules (NER).

Following changes introduced by the Australian Energy Market Commission (AEMC) in November 2012, there is a transitional approach to the regulation of NSW network service providers over the 2014 to 2019 regulatory control period. This two-stage approach has involved the AER making a transitional determination for FY15, before publishing its final 2014-19 determination on 30 April 2015.

This Network Pricing Proposal has been prepared in line with this final revenue determination and is submitted for review and approval by the AER as required under chapter 6 of the NER.

We acknowledge that the timing of these arrangements has presented a challenge to our goal of undertaking meaningful engagement with our customers on pricing issues.

In preparing this proposal, Ausgrid has written to stakeholders to explain the process and its timeframe, and invite feedback. We have also outlined some of the key issues we are considering as part of the tariff reform process. We intend to continue these discussions as we prepare our new Tariff Structure Statement to submit to the AER in November 2015, outlining our proposed pricing reforms for the period from 1 July 2017 to 30 June 2019.

We know from our past discussions with customers and stakeholders that the price increases required in the previous regulatory period could not continue. Throughout this extensive engagement process, our customers have consistently indicated that they want future price rises kept below the rate of inflation, but they are not prepared to trade off existing safety and reliability standards in exchange for lower prices.

The interim tariff changes we are proposing in this submission will allow us to meet the AER's revenue cap and comply with new AEMC rules requiring more cost-reflective pricing, while delivering a fair outcome for customers.

We also need to ensure the ongoing sustainability of operating a safe and reliable electricity supply for our customers and the community. It is therefore important to note that the proposed network use of system tariffs for FY16 set out in this document are interim tariffs that may be varied during the course of the regulatory year, depending on the outcome of any appeal Ausgrid's decision to appeal may bring against the AER's final determination. This will assist with smoothing any price outcomes arising from the appeal process so as to minimise price volatility.

In the event that the Australian Competition Tribunal makes an order to vary, substitute or remit the AER's Final Determination, Ausgrid may vary the DUOS component of the interim tariffs during the course of FY16 as set out in section 6 of this proposal.

The following table shows the AER's final determination on revenue for Ausgrid's distribution and transmission standard control services over the regulatory control period.



In line with the AER's final decision, this Network Pricing Proposal is expected to have the following impact on the overall network component of customers' annual electricity bills:

- a typical residential customer<sup>1</sup> on the default residential block tariff is estimated to receive a nominal network use of system bill decrease of around \$112.83 in FY16.
- a typical small business customer<sup>2</sup> on the default small business block tariff is estimated to receive a nominal bill decrease of around \$76.23 in FY16.

Ausgrid is also proposing to introduce the following changes to its tariffs in FY16:

- The block tariff structure will remain the primary default network use of system tariff for new residential and small business customers, and will continue to be transitioned to a declining block price structure, keeping customers' network price increases below CPI.
- Under the AEMC's rule changes requiring prices to reflect the efficient cost of providing services, the relative discount for Time of Use tariffs will be reduced, while keeping price changes below CPI.
- New eligibility criteria for Cost Reflective Network Price (CRNP) tariffs will improve efficiency and equity, and are likely to result in most existing CRNP sites being reassigned to transitional tariffs.

- AER also requires distribution businesses like Ausgrid to include, for the first time, a fixed metering charge separately calculated to our network tariffs for our residential and small business customers (<160 MWh pa). Retailers will decide whether to show this fixed charge on a customer's final bill. The AER Final Decision approves two types of metering charges: an annual meter charge and an up-front capital charge for all new and upgraded meters installed after 1 July 2015, refer to Chapter 16 of this document for more information.
- The AER has applied a cap on what Ausgrid is allowed to charge for ancillary network services, which has resulted in these charges increasing by less than CPI in FY16.

While we have attempted to write this document in a style easily understood by external stakeholders who might not be familiar with network pricing and regulatory requirements, it has been necessary to use some technical terms. To assist our customers and stakeholders, we have also prepared a summary document which is available at:

[www.ausgrid.com.au/networkprices](http://www.ausgrid.com.au/networkprices).

Inquiries about our Network Pricing Proposal can be directed to [networkpricing@ausgrid.com.au](mailto:networkpricing@ausgrid.com.au).

We also welcome feedback on our regulatory submissions via [yoursay@ausgrid.com.au](mailto:yoursay@ausgrid.com.au) and our Twitter and Facebook pages, at [www.twitter.com/Ausgrid](https://www.twitter.com/Ausgrid) and [www.facebook.com/Ausgrid](https://www.facebook.com/Ausgrid).

**Table 1.1: Ausgrid's AER Final Determination – Annual (Smoothed) Forecast Revenue**

Standard Control Services	Units	FY15	FY16	FY17	FY18	FY19
<b>Annual (Nominal) Distribution Revenue Requirement</b>	\$m	1,956	1,507	1,450	1,440	1,430
<b>Annual (Nominal) Transmission Revenue Requirement</b>	\$m	252.3	186.3	186.9	187.5	188.1

<sup>1</sup> For an average residential customer on the block tariff who consumes 5,000 kWh per annum, and does not have controlled load hot water. Forecast bill outcome excludes GST. Retail related cost increases not included.

<sup>2</sup> For an average small business customer on the block tariff who consumes 10,000 kWh per annum. Forecast bill outcome excludes GST. Retail related cost increases not included.

## 2 Overview

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This document is Ausgrid's formal Pricing Proposal for FY16 and is submitted for review and approval by the Australian Energy Regulator (AER) as required by clause 6.18.2(a)(2) of chapter 6 in the National Electricity Rules (NER). It is structured to allow ready assessment of compliance by the AER.

### AEMC rule determination

The Australian Energy Market Commission (AEMC) issued their final determination on the new distribution pricing arrangements under chapter 6 of the NER in late 2014. The new pricing rules are significantly different to the previous rules in the sense distribution businesses must now set network tariffs in a manner that contributes to the achievement of a new network pricing objective, as set out in clause 6.18.5(a) of the NER:

"The tariffs that a Distribution Network Service Provider charges in respect of its provision of direct control services to a retail customer should reflect the Distribution Network Service Provider's efficient costs of providing those services to the retail customer.

To contribute the achievement of the new network pricing objective, network businesses are required to set network tariffs in accordance with the following pricing principles:

- Each network tariff must be based on the long run marginal cost of providing the service, refer to clause 6.18.5(f);
- The revenue to be recovered from each network tariff must recover the network business' total efficient costs of providing services in a way that minimises distortions to price signals that encourage efficient use of the network by consumers, refer to clause 6.18.5(g)(3);
- The revenue to be recovered from each network tariff must reflect the Distribution Network Service Provider's total efficient costs of serving the retail customers that are assigned to that tariff, refer to clause 6.18.5(g)(1);
- Tariffs are to be developed in line with a new consumer impact principle that requires network businesses to consider the impact on consumers of changes in network tariffs and develop price structures that are able to

be understood by consumers, refer to clause 6.18.5(h) and clause 6.18.5(i);

- Network tariffs must comply with any jurisdictional pricing obligations imposed by state or territory governments, refer to clause 6.18.5(j)
- The level of tariffs for a tariff class must be set such that the expected revenue for that tariff class is between the avoidable cost of not providing the service and the stand-alone cost of providing the service to the consumers in that tariff class, refer to clause 6.18.5(e); and
- The level of tariffs for a tariff class must comply with the side constraint limit, refer to clause 6.18.6.

### Transitional arrangements

The new distribution pricing arrangements also contain new processes and timeframes for the setting of network tariffs that aim to improve certainty, timeliness and transparency for consumers and retailers. Distribution businesses will be required to:

- Submit a tariff structure statement (TSS) to the AER for approval under chapter 6 of the NER as part of their five-year regulatory reset process.
- Demonstrate to the AER how they have consulted with consumers and retailers in developing their price structures.
- Notify consumers and retailers of final network prices at least six weeks before they commence, allowing them to better prepare for price changes.

While the new pricing rules do not take effect until 1 July 2017, transitional Rules have been implemented that requires Ausgrid (and the other NSW DNSPs) to implement the new pricing Rules by 1 July 2017. Network tariffs for the next two years will be set under existing distribution pricing rules.<sup>3</sup>

### Outline of compliance with rules

Ausgrid's interim pricing proposal assesses all of the requirements set out in Rule 6.18.2. Our interim pricing proposal also demonstrates compliance against the applicable distribution

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<sup>3</sup> AEMC, Version 65, National Electricity Rules.

determination, as required under clause 6.18.2(b)(7) of the NER.

Specifically, the proposal sets out the tariff classes, tariffs and charging parameters, and expected revenue for the year commencing 1 July 2015 and ending 30 June 2016.

This pricing proposal is structured as follows:

- Chapter 1 provides an introduction and overview of the pricing proposal document;
- Chapter 2 provides an overview and outline of the pricing proposal document;
- Chapter 3 sets out the proposed tariff classes for standard control services, the basis for the proposed tariff classes, and Ausgrid's procedures for the assignment and re-assignment of customers to tariff classes;
- Chapter 4 sets out the proposed interim tariffs and charging parameters, and the matters that Ausgrid has taken into account when determining these tariffs and charging parameters including the long run marginal costs of providing services to each tariff class, the transaction cost implications and the scope for customers to respond price signals;
- Chapter 5 sets out the weighted average revenue by tariff class and compares it to the efficient revenue boundary defined by the standalone cost and avoidable cost;
- Chapter 6 briefly discusses the variations to tariffs;
- Chapter 7 sets out the obligations on Ausgrid to recover our contribution to the Climate Change Fund;
- Chapter 8 sets out the approach to passing through the cost of transmission use of system services;
- Chapter 9 sets out the approach to reporting the overs and unders account for distribution standard control services;
- Chapter 10 sets out the changes since the previous regulatory year, as provided for in the Determination and the NER; and provides information on how the pricing proposal complies with the requirements for pricing proposals as set out in the NER;
- Chapter 11 sets out the proposed interim network tariffs for FY16;
- Chapter 12 sets out the procedure for the annual system of assessment and review of tariffs;

- Chapter 13 sets out the background information and mechanism of the D-factor;
- Chapter 14 sets out the tariffs and tariff class for Ausgrid's public lighting services for FY16;
- Chapter 15 sets out the tariffs and tariff class for Ausgrid's ancillary network services for FY16. These services have been previously known as miscellaneous and monopoly services;
- Chapter 16 sets out the tariff class for type 5 and 6 metering charges.

Ausgrid notes that Attachment D to this proposal demonstrates that our proposed interim prices for FY16 comply with the AER's Final Decision and our obligations under chapter 6 of the NER.<sup>4</sup>

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<sup>4</sup> This document is available from [www.aer.gov.au](http://www.aer.gov.au)

### 3 Network tariff classes

#### RULE REQUIREMENT

*Clause 6.18.2(b)(2) of the NER requires that a pricing proposal must set out the proposed tariffs for each tariff class that is specified in the Distribution Service Network Provider's tariff structure statement for the relevant regulatory control period.*

*In addition, when developing procedures for assigning customers to tariff classes the AER is required to have regard to the following principles;*

*(1) 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;*

*(2) customers with a similar connection and usage profile should be treated on an equal basis;*

*(3) however, customers with micro-generation facilities should be treated no less favorably than customers without such facilities but with a similar load profile.*

*Clause 6.18.3(d) requires that a tariff class be constituted with regard to the need to group customers together on an economically efficient basis, and the need to avoid unnecessary transactions costs.*

#### Definition of a Network Tariff Class

Under chapter 10 of the NER, tariff classes are defined as representing 'a class of customers for one or more direct control services, who are subject to a particular tariff or particular tariffs'.

#### Proposed reforms to the eligibility criteria for the CRNP tariff class in FY16

It is important to note that Ausgrid proposes to change the eligibility criteria for the CRNP tariff class.

This proposed change to the eligibility criteria for the CRNP tariff class in FY16 is required because the existing criteria results in

economically perverse outcomes for large load customers with unstable network usage patterns.

The proposed change to the eligibility criteria for the CRNP tariff class is shown in the table below:

**Table 3.1: Ausgrid's Proposed CRNP Criteria**

Existing CRNP Criteria	Proposed CRNP Criteria
Applicable to connections at any voltage that use more than 10 MW of electricity demand on at least three occasions over a 12 month period or consume more than 40 GWh over a 12 month period.	Applicable to a site that is directly connected to Transmission Connection Point (TCP) in Ausgrid's network area <sup>5</sup>

The proposed change in the eligibility criteria for the CRNP tariff class will result in some of the customers currently assigned to the CRNP tariff class no longer being eligible to remain in this tariff class. As required under Attachment 14 of the AER Final Decision, Ausgrid is required to re-assign these sites to an appropriate tariff class as part of the annual pricing proposal process for FY16. Please refer to chapter 12 of this document for more information.

#### Notice of Proposed Assignment and Re-assignment and Rights of Objection

Ausgrid is required to follow the tariff class assignment and re-assignment procedure set out in Attachment 14 of the AER Final Decision. The key elements of the AER Final Decision on the procedure for assigning or re-assigning customers to another tariff class are set out below:

- Ausgrid is required to notify the Retail customer's retailer in writing or through the appropriate B2B processes prior to the re-assignment of the site to another tariff class.
- This notice must advise the Retailer of all of the matters set out in Appendix D of the AER Final Decision, such as:
  - The retailer may request further information from Ausgrid.

<sup>5</sup> Note: To be eligible for the CRNP tariff class, the site must not require the use of any distribution assets.

- The retailer or the Retail customer may object to the proposed re-assignment to another tariff class.
- A copy of Ausgrid's internal procedure for reviewing objections or complaints, or a link to Ausgrid's website.
- If an objection is not satisfactorily resolved under Ausgrid's internal dispute resolution process within a reasonable timeframe, the customer is entitled to escalate the matter to the NSW Energy and Water Ombudsman (EWON) if they are a small retail customer and resolution of such disputes is within the jurisdiction of EWON.
- If the objection is not resolved to the satisfaction of the retail customer under Ausgrid's internal dispute resolution process or EWON, the retail customer is entitled to seek a decision of the AER via the dispute resolution process available under Part 10 of the NEL.
- If Ausgrid receives a request for further information from a retail customer in response to the issuance of the notice, then it must provide such information within a reasonable timeframe.
- If a retail customer or their retailer makes an objection to Ausgrid about the proposed assignment or re-assignment to another tariff class, Ausgrid must reconsider the proposed assignment or re-assignment. In doing so, Ausgrid must take into consideration the tariff assignment factors and notify the retail customer's retailer in writing of its decision and the reasons for that decision.
- If an objection to a tariff class assignment or re-assignment is upheld, then any adjustment which needs to be made to tariffs will be done by Ausgrid as part of the next annual review of tariffs.

### **Proposed Tariff arrangements for CRNP customers impacted by proposed change in CRNP criteria**

Given that there is the potential for this process to take a considerable amount of time, particularly if a CRNP customer objects to the proposed re-assignment to another tariff class, Ausgrid proposes to keep the existing CRNP customers that no longer satisfy the criteria on their individually calculated network use of system tariffs in the CRNP tariff class until the tariff re-assignment process has been completed. This will require that Ausgrid implement the following network use of system tariff arrangements for these sites in FY16:

- An individually calculated tariff in the CRNP tariff class to apply to these sites from 1 July 2015.
- An individually calculated tariff in the appropriate tariff class to apply to these sites in FY16, subject to the outcome of the notification and objection process.

It is also important to note that Ausgrid proposes to align the level and structure of the individually calculated tariff in the appropriate tariff class with their tariff in the CRNP tariff class. This approach will ensure that these sites do not receive an unacceptable network bill increase as a consequence of being re-assigned to another tariff class in FY16. For more information on Ausgrid's proposed transitional tariff strategy for these sites, refer to chapter 11 of this document.

### **Proposed Network Tariff classes for Standard Control Services**

Ausgrid's proposed tariff classes for direct control services in FY16 are shown in the following table.



**Table 3.2: Ausgrid's Proposed Tariff Class Descriptions - FY16**

<b>Tariff Class</b>	<b>Network Tariff</b>	<b>Definition</b>
<b>Low Voltage</b>	EA010 – Residential Inclining Block EA025– Residential Time of Use EA030 – Controlled load 1 EA040 – Controlled load 2 EA050– Small Business Inclining Block EA225– Small Business Time of Use EA302 – LV 40-160 MWh (System) EA305– LV 160-750 MWh (System) EA310 – LV > 750 MWh (System) EA325 – LV Connection (Standby - Closed)	Applicable to separately metered low voltage (400V or 230V) connections.
<b>High Voltage</b>	EA360 – HV Connection (Standby - Closed) EA370 – HV Connection (System) EA380 – HV Connection (Substation) Customer Specific Prices	Applicable to any connection at high voltage (11kV) that is not otherwise eligible for a CRNP as defined below.
<b>Sub-transmission</b>	EA390 – ST Connection Customer Specific Prices	Applicable to any connection at a sub-transmission voltage (132/66/33kV) that is not otherwise eligible for a CRNP price, as defined below.
<b>Cost Reflective Network Prices (CRNP)</b>	Customer Specific Prices	Applicable to a site that is directly connected to Transmission Connection Point (TCP) in Ausgrid's network area <sup>6</sup>
<b>Unmetered</b>	EA401 – Public Lighting EA402 – Constant Unmetered EA403 – EnergyLight	Applicable to any LV connection that is defined as an unmetered supply by Ausgrid in consultation with AEMO as per clause S7 2.3 (Item 5) of the NER.

<sup>6</sup> Note: To be eligible for the CRNP tariff class, the site must not require the use of any distribution assets.

## 4 Proposed interim tariffs and charging parameters

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### RULE REQUIREMENT

*Clause 6.18.2(b)(2) requires that the pricing proposal set out the proposed tariffs for each tariff class; and*

*Clause 6.18.2(b)(3) requires that the pricing proposal set out the charging parameters and the elements of service to which each charging parameter relates,*

*Rule 6.18.5 sets out the pricing principles that are relevant when determining tariffs and charging parameters.*

*Rule 6.18.5 further provides that:*

*(b) A tariff, and if it consists of two 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.*

This chapter sets out the proposed interim tariffs and charging parameters for direct control services for each tariff class for the period of 1 July 2015 to 30 June 2016, and explains the elements of service to which each charging parameter relates. The proposed interim tariffs and charging parameters for standard control services are set out for each tariff class in Table 4.1, 4.2, 4.3 and 4.4. This chapter also explains how Ausgrid has applied the pricing principles set out in clause 6.18.5 of the NER.

In developing the charging parameters, Ausgrid has taken account of a range of estimates of long run marginal cost, and has had regard to transactions costs and the scope for customers to respond to price signals. In addition, Ausgrid has ensured that its network tariffs are designed to recover the difference between marginal and average cost with the minimum of distortion to efficient patterns of consumption.

The tariffs and charging parameters for alternative control services are discussed in chapter 14 (Public Lighting), chapter 15 (Ancillary Network Services) and chapter 16 (Type 5 and 6 Metering Charges) of this document.

**Table 4.1: Ausgrid's Proposed Interim FY16 Network Tariffs by Charging Parameter (Exclusive of GST) - DUOS**

Tariff Class	Tariff Code	Tariff Name	Network Access Charge	Network Energy Prices							Daily Capacity Prices	
				Non-TOU	Peak	Shoulder	Off-peak	Block 1	Block 2	Block 3	Peak	Peak
			c/day	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kW/day	c/kVA/day
<b>Low Voltage</b>	EA010	LV Res non-TOU	32.75					5.77	5.20	5.40		
	EA025	LV Res < 40 MWh (System)	40.83		17.29	4.17	1.52					
	EA030	Controlled Load 1	0.14									
	EA040	Controlled Load 2	9.89									
	EA050	LV Business non-TOU	118.00					5.30	4.90			
	EA225	LV Business TOU	116.45		13.20	5.02	0.64					
	EA302	LV 40-160 MWh (System)	571.73		2.40	1.20	0.90				34.67	
	EA305	LV 160-750 MWh (System)	1,722.50		2.20	0.90	0.20					34.67
	EA310	LV > 750 MWh (System)	2,152.20		2.05	0.65	0.20					34.67
	EA325	LV Connection (Closed)	2,152.70		6.90	4.95	1.09					0.10
	EA316	Transitional 40-160 MWh (Closed)	116.45		10.85	4.89	0.87					
	EA317	Transitional 160-750 MWh (Closed)	116.45		10.85	4.89	0.87					
<b>High Voltage</b>	EA360	HV Connection (Closed)	1,938.40		4.62	0.45	0.35					0.10
	EA370	HV Connection (System)	4,307.56		2.20	1.50	0.70					17.30
	EA380	HV Connection (Substation)	4,307.56		1.87	1.28	0.60					14.71
<b>Sub-transmission</b>	EA390	STV Connection (System)	5,384.45		1.70	1.20	0.60					5.00
	EA391	ST Connection (Substation)	5,384.45		1.45	1.02	0.51					4.25
<b>Unmetered</b>	EA401	Public Lighting		5.53								
	EA402	Constant unmetered		6.76								
	EA403	EnergyLight		4.59								

Please note that the prices in the table above have been rounded to two decimal places in the pricing proposal document

**Table 4.2: Ausgrid's Proposed Interim FY16 Network Tariffs by Charging Parameter (Exclusive of GST) - TUOS**

Tariff Class	Tariff Code	Tariff Name	Network Access Charge c/day	Network Energy Prices							Daily Capacity Prices	
				Non-TOU c/kWh	Peak c/kWh	Shoulder c/kWh	Off-peak c/kWh	Block 1 c/kWh	Block 2 c/kWh	Block 3 c/kWh	Peak c/kW/day	Peak c/kVA/day
Low Voltage	EA010	LV Res non-TOU						4.54	4.83	4.38		
	EA025	LV Res < 40 MWh (System)			8.29	0.74	0.74					
	EA030	Controlled Load 1		1.44								
	EA040	Controlled Load 2		4.32								
	EA050	LV Business non-TOU						4.60	4.70			
	EA225	LV Business TOU			7.52	1.05	0.71					
	EA302	LV 40-160 MWh (System)			2.20	0.77	0.00					
	EA305	LV 160-750 MWh (System)			1.93	0.75	0.65					
	EA310	LV > 750 MWh (System)			1.52	0.75	0.50					
	EA325	LV Connection (Closed)			0.60	0.51	0.51					
	EA316	Transitional 40-160 MWh (Closed)			10.52	1.18	0.47					
	EA317	Transitional 160-750 MWh (Closed)			10.52	1.18	0.47					
High Voltage	EA360	HV Connection (Closed)			3.29	4.00	1.66					0.47
	EA370	HV Connection (System)			0.45	0.11	0.25					1.30
	EA380	HV Connection (Substation)			0.40	0.10	0.20					1.25
Sub-transmission Voltage	EA390	ST Connection			0.35	0.15	0.15					0.92
	EA391	STV Connection (Substation)			0.33	0.14	0.10					0.87
Unmetered	EA401	Public Lighting		1.85								
	EA402	Constant Unmetered		2.47								
	EA403	EnergyLight		2.15								

Please note that the prices in the table above have been rounded to two decimal places in the pricing proposal document



**Table 4.3: Ausgrid's Proposed Interim FY16 Network Tariffs by Charging Parameter (Exclusive of GST) - CCF**

Tariff Class	Tariff Code	Tariff Name	Network Access Charge c/day	Network Energy Prices							Daily Capacity Prices	
				Non-TOU c/kWh	Peak c/kWh	Shoulder c/kWh	Off-peak c/kWh	Block 1 c/kWh	Block 2 c/kWh	Block 3 c/kWh	Peak c/kW/day	Peak c/kVA/day
<b>Low Voltage</b>	EA010	LV Res non-TOU						0.49	0.49	0.49		
	EA025	LV Res < 40 MWh (System)			0.49	0.49	0.49					
	EA030	Controlled load 1		0.30								
	EA040	Controlled load 2		0.30								
	EA050	LV Business non-TOU						0.73	0.72			
	EA225	LV Business TOU			0.73	0.73	0.73					
	EA302	LV 40-160 MWh (System)			0.73	0.73	0.73					
	EA305	LV 160-750 MWh (System)			0.73	0.73	0.73					
	EA310	LV > 750 MWh (System)			0.73	0.73	0.73					
	EA325	LV Connection (Closed)			0.73	0.73	0.73					
	EA316	Transitional 40-160 MWh (Closed)			0.81	0.81	0.81					
	EA317	Transitional 160-750 MWh (Closed)			0.81	0.81	0.81					
<b>High Voltage</b>	EA360	HV Connection (Closed)			0.49	0.49	0.49					
	EA370	HV Connection (System)			0.49	0.49	0.49					
	EA380	HV Connection (Substation)			0.49	0.49	0.49					
<b>Sub-transmission</b>	EA390	ST Connection			0.49	0.49	0.49					
	EA391	ST Connection (Substation)			0.49	0.49	0.49					
<b>Unmetered</b>	EA401	Public lighting		0.73								
	EA402	Constant unmetered		0.73								
	EA403	EnergyLight		0.73								
Please note that the prices in the table above have been rounded to two decimal places in the pricing proposal document												

There are three elements of service for which charging parameters are defined, namely:

- Network access charge per day per connection (c/connection/day) – this is a flat charge per connection, charged on the basis of the number of days of access to the network for that connection. A connection is defined as any connection to the network requiring a unique National Metering Identifier (NMI) as defined by the AEMO National Metering Identifier Procedure;
- Electricity usage charge (c/kWh) – this is a charge per unit of electricity supplied to a connection point, through a primary tariff or also through an additional secondary tariff (usually controlled load hot water as seen from the Non-ToU charging parameter); and
- Capacity charge per kiloWatt or kilovoltAmp, per day (c/kW/day or c/kVA/day) – this is a charge based on a customer's maximum demand recorded on a working weekday, in any half-hour period between 2pm and 8pm over the twelve months preceding the end of the current billing month. Maximum demand is recorded in either kW or kVA according to the customer's metering functionality.

In addition, there are a number of alternative components for the electricity usage charge including:

1. A block energy charge – this charge which is triggered once a threshold amount of electricity use has been used in each billing quarter. All electricity used after this point is charged at a different rate based on (c/kWh). For example, the residential block structure has three blocks with annual energy consumption thresholds at 0 to 4000 kWh, 4000 to 8000 kWh and greater than 8000 kWh. The business block tariff structure has two blocks with an annual energy consumption threshold of 10,000 kWh.

2. Time of use consumption charges vary according to the time of day of consumption and whether it is a weekday, or weekend/public holiday, as summarised in Table 4.5.

Ausgrid has a block tariff structure for its primary default network use of system tariff for new residential and small business customers. These new connections are required to have Type 6 metering installations unless they decide to install a solar PV system. The block pricing structure is to encourage customers to consume energy efficiently in light of our network circumstances. Ausgrid believes that the current three block structure represents an appropriate option under basic accumulation metering. On this basis, Ausgrid does not intend to change the consumption thresholds under the current IBT structure.

**Table 4.5: Ausgrid's Proposed Time of Use period Definition**

Customer Type	Annual consumption	Time of Use period definition
<b>Residential and Small Business</b>	< 40 MWh per annum	<p>Peak period: 2.00 pm – 8.00 pm on working weekdays.</p> <p>Shoulder period: 7.00 am – 2.00 pm and 8.00 pm – 10.00 pm on working weekdays and from 7.00 am – 10.00 pm on weekends and public holidays</p> <p>Off-Peak period : All other times</p>
<b>Medium and Large Business</b>	> 40 MWh per annum	<p>Peak period: 2.00 pm – 8.00 pm on working weekdays.</p> <p>Shoulder period: 7.00 am – 2.00 pm and 8.00 pm – 10.00 pm on working weekdays</p> <p>Off-Peak period : All other times</p>

Ausgrid is aware that our decision to transition to a declining block price signal will change the distribution of network bill outcomes across customers with different levels of energy consumption. This is why we have made this change in FY 2015/16 – in an environment where Ausgrid is required to reduce the level of network tariffs to comply with the final determination. This will ensure that our major tariff reform centerpiece is introduced with no customer receiving a network use of system bill increase in excess of CPI.

Importantly, Ausgrid is also focused on reducing the discount under the TOU tariff by increasing the level of the TOU prices over time to more cost reflective levels. To ensure that our customers on TOU do not receive unacceptable bill outcomes as a result of unwinding this discount, Ausgrid proposes to increase the TOU tariffs by no more than CPI in FY16.

This approach to tariff reform is consistent with Ausgrid's commitment to pursuing network tariff reform in a socially responsible manner by striking an appropriate balance between economic and equity objectives.

### Long run marginal costs

The concept of marginal costs is important in economics because of the general principle that setting prices equal to marginal costs presents consumers with the opportunity costs of their consumption decisions, and results in an efficient allocation of society's resources.

The timeframe over which marginal costs are considered to vary with consumption is the distinguishing difference between the concepts of short-run marginal cost (SRMC) and long-run marginal cost (LRMC). In the short-run only costs that directly vary with demand can be avoided (such as the need for some repairs and maintenance, or call centre costs), while in the long-run capital costs can be avoided particularly if anticipated demand growth does not eventuate. The LRMC is equal to the SRMC plus the marginal capital costs.

The use of LRMC as a basis for determining usage charges is common in network businesses to provide customers with signals about the incremental capital and operating costs associated with use of the network. The use of LRMC is preferred over SRMC because of a desire to minimise the scope for network constraints to ration use of the network. In principle, the use of LRMC ensures that sufficient network capacity is made available such that demand is always able to be met by supply capacity.

Importantly, LRMC is a forward looking concept and should be estimated taking into account future expectations of the growth in costs to meet expected increases in demand. There are a number of methods commonly used to estimate the LRMC for network businesses including the Average Incremental Cost (AIC) approach and the Turvey methodology.

These two approaches differ in the methodology used to estimate the incremental impact of changes in demand on capacity related expenditure. The AIC approach calculates the average of expected capacity related expenditure over the period that output is expected to change. In contrast, the Turvey approach directly estimates the change in expenditure resulting from an increment or decrement in forecast demand.

While there are strong theoretical support for the Turvey approach, Ausgrid has instead estimated the LRMC for each tariff class using the AIC approach, as shown in the table below:

**Table 4.6: Ausgrid's Long Run Marginal Cost**

Tariff Class	LRMC Estimate (\$/kVA)
Low Voltage	\$261
High Voltage	\$69
Sub-transmission Voltage	\$50
CRNP	\$50
Unmetered	\$0

The application of LRMC to the setting of efficient network tariffs is a two-step process, as summarised below:

1. To select the charging parameter to use to signal LRMC to customers.
2. To convert the LRMC estimate from a \$ per kVA basis to a cents per kWh basis, if required.

Ausgrid believes it is efficient (and appropriate) that LRMC estimates be reflected only in the setting of charging parameter(s) that cover the period when there is a material likelihood of system-wide network congestion, which are a key driver of network augmentation costs. A review of Ausgrid's existing charging

parameters indicates that there are strong economic grounds to reflecting LRMC in the setting of peak energy charges given that there is a reasonable probability that usage during peak periods will be correlated with network driving augmentation costs.<sup>7</sup> It is important to note that future network tariff reforms could result in the capacity charge, rather than peak energy charges, being the most efficient charging parameter to reflect LRMC. The potential reform options for the capacity charging parameter will focus on improving the economic efficiency of the peak price signal by recognising that marginal costs of peak network capacity vary by the following dimensions:

- Time of year – the network is generally constrained during high peak demand periods of summer and winter;
- Time of day – peak demand during the day tends to reflect temperature conditions and their impact on heating and cooling loads; and
- Location in the network – the balance between peak demand and network capacity tends to vary within the network area.

In recognition of the importance of LRMC based pricing to customers and other external stakeholders, Ausgrid intends to review the methodology and modelling of LRMC in the near future to ensure that this important basis to the setting of peak charges is consistent with best practice.

Given the decision to reflect LRMC in the peak energy charges, it is necessary to convert the LRMC estimates for each tariff class from a \$ per kVA basis to a cents per kWh basis. Ausgrid intends to use an approached originally developed by Endeavour Energy.

The formula used by Ausgrid to make this conversion is shown below:

$$LRMC(c/kWh) = \left[ \frac{LRMC}{\rho_i} \right] \times \alpha_i$$

Where:

*LRMC* is the estimate of LRMC, expressed on \$/kW basis.

$\alpha_i$  is the probability that the quantities in respect to charging parameter *i* correlate with network congestion.

$\rho_i$  is the peak hours per annum in respect to charging parameter *i*.

Applying the above formula results in the conversion of the LRMC estimate from a \$ per kVA to a cents per kWh basis, at each voltage level. The estimates of LRMC using this calculation (adjusted for CPI) are shown for Ausgrid in the table below:

**Table 4.7: Ausgrid's Long Run Marginal Cost Estimate – cents per kWh**

Tariff Class	Assumed Power Factor	LRMC Estimate by Tariff Structure		
		Controlled Load Energy Charge	Anytime Energy Charge	Peak Energy Charge
Low Voltage	0.85	0	3	14.8
High Voltage	0.90	N/A	N/A	3.5
Sub-transmission Voltage	0.95	N/A	N/A	2.7
CRNP	0.95	N/A	N/A	2.7
Unmetered	0.85	N/A	0	N/A

<sup>7</sup> This correlation is likely to strengthen if the peak period definition is reformed to more accurately reflect summer and winter patterns of network congestion.



As required by the NER, Ausgrid has taken into account the estimated range of LRMC estimates shown in the above table when setting the energy charging parameters of our network tariffs for FY16. This has meant that for some network tariffs, where the current peak charge is above the upper range of LRMC, the peak energy charge is proposed to be reduced in FY16. In addition, Ausgrid has taken into account the need to recover residual costs in a manner that minimises the distortion to efficient energy consumption patterns, where appropriate to do so in light of our other pricing objectives, such as equity.

### **Transactions costs**

In developing the tariffs and charging parameters, Ausgrid has been mindful of minimising the transactions costs associated with levying charges.

Ausgrid believes that its network tariffs and charging parameters strike an appropriate balance between transactions costs and ensuring that appropriate signals are provided to customers to facilitate the efficient use of network services.

### **Scope to respond to price signals**

Ausgrid's network tariffs and charging parameters provide both short term and long term incentives to our customers to modify consumption patterns in line with efficient use of network services.

## 5 Weighted average revenue

### RULE REQUIREMENT

*Clause 6.18.2(b)(4) of the NER requires that a pricing proposal 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.*

This chapter sets out the expected weighted average revenue from tariffs within each tariff class for standard control services.

This chapter also provides a comparison of the expected revenues with our estimates of the standalone and avoidable costs at the tariff class level to demonstrate that our proposed tariffs comply with the principles set out in the NER.

The weighted average revenue for FY15 and FY16 is set out in the following Table 5.1.

### Estimating standalone costs

The standalone costs represent the costs that would be incurred to replicate or bypass the infrastructure used to provide a service. It represents an upper bound of costs that should be recovered from customers in a particular tariff class. If customers were paying above the standalone costs then it follows that it would be economically beneficial for customers to switch to an alternative provider, and similarly if entry was economically feasible it would result in new suppliers entering to provide services. This creates the possibility of inefficient bypass of the infrastructure.

To estimate the standalone costs for a tariff class, Ausgrid has used the construct of a hypothetical new entrant distribution network service provider that is seeking to supply services to each tariff class separately. Ausgrid has then asked what infrastructure and operating costs would be incurred to supply the tariff class alone, without the benefit of any economies of scale and scope arising from the supply of services to all other tariff classes. To assist with estimating the cost of the hypothetical new entrant, Ausgrid has drawn upon information from its own costs as follows:

- Identification of the segments of the network that would be required to provide services to each tariff class. For example, for HV Business customers we identified the cost of replicating the network from the point of customer connection to the high voltage network to the connection with the TransGrid transmission network.
- Develop an estimate of the annual capital charge for the relevant network by applying the same return to capital and depreciation parameters as set out in the Determination.
- Develop an estimate of the operating costs that would be incurred in order to provide services to the tariff class by identifying those operating costs that are necessarily incurred by Ausgrid for the provision of network services to that tariff class.

The associated summation of the annual estimated capital and operating costs for each tariff class are therefore estimated to represent the standalone costs that would be incurred by a hypothetical new entrant.

**Table 5.1: Expected DUOS Revenue by Tariff Class (\$ million excluding GST)**

Tariff Class	Expected DUOS Revenue	
	FY15(\$m)	FY16(\$m)
Low Voltage	\$1,886.22	\$1,369.25
High Voltage	\$45.22	\$40.95
Sub-transmission Voltage	\$6.30	\$11.34
Unmetered	\$12.68	\$10.47
CRNP	\$50.20	\$38.04
<b>Total</b>	<b>\$2000.63</b>	<b>\$1,470.06</b>

Ausgrid believes that there is scope to improve its estimation of standalone cost and intends to undertake a review prior to the commencement of the next regulatory control period. In light of the distribution pricing rule change request currently under consideration by the AEMC, Ausgrid has decided to delay this review and update the standalone estimates for FY16 to reflect only movements in CPI.

A more robust standalone cost estimate will be provided to external stakeholders once the review has been completed and there is more certainty under the NER.

The estimated standalone costs for each tariff class are set out in the following table.

**Table 5.2: Comparison of Standalone Costs Vs FY16 DUOS Tariffs**

Tariff Class	Total Standalone Cost	Weighted Average Revenue	Weighted Average Revenue as a proportion of Standalone Cost
	FY16 (\$m)	FY16 (\$m)	FY16 (%)
Low Voltage	\$1,680.64	\$1,369.25	81.5%
High Voltage	\$237.96	\$40.95	17.2%
Sub-transmission Voltage	\$176.49	\$11.34	6.4%
Unmetered	\$673.41	\$10.47	1.6%
CRNP	\$159.02	\$38.04	23.9%

### Estimating avoidable costs

The avoidable costs represent those costs that could be avoided by a business if it was not supplying goods or services to its customers. It represents the lower bound of costs that should be recovered from customers. If customers were charged below the avoidable costs it would be economically beneficial for the business to stop supplying the customer and thereby avoid the associated costs which would exceed the revenue expected to be obtained from the customer.

To estimate the avoidable costs for each proposed tariff class, Ausgrid has:

- identified those categories of costs that would be avoided if a tariff class was no longer served;
- allocated the cost of each avoidable cost category to each tariff class based on either volume or customer numbers, according to the nature of the cost category, to determine those costs that would be reduced if a particular tariff class was no longer served;
- summed the allocated avoidable cost for all avoidable cost categories for each tariff class to estimate the total avoidable cost for each tariff class.

The cost categories that were identified as being avoidable included:

- repairs and maintenance – this was identified as a partially avoidable cost given that use of the network impacts on its deterioration and the need for repairs and maintenance;
- customer service – these costs relate to managing billing and customer service enquiries which are related to the number of customers served;
- metering costs – these costs relate to meter reading and meter replacement and are related to the number of customers served;
- corporate and divisional support costs – costs relating to media, marketing and legal expenses can be considered to be driven by the number of customers served; and
- customer connections and installation inspections – these costs can be considered to be proportional to customer numbers, the voltage and capacity of the connection.

The following Table 5.3 sets out the avoidable costs for each of the tariff classes.

As required under clause 6.18.5(a)(1) of the NER, the following table provides a comparison of weighted average distribution revenue in FY16

with the estimates of standalone and avoidable costs for each tariff class.

bounds of the upper limit (standalone cost) and the lower limit (avoidable cost).

As required under the NER, the weighted average distribution revenue lies within the

**Table 5.3: Comparison of Avoidable Costs Vs FY16 DUOS Tariffs**

Tariff Class	Total Avoidable Costs	Weighted Average Revenue	Avoidable Cost a proportion of expected revenue
	FY16 (\$m)	FY16 (\$m)	FY16 (%)
Low Voltage	\$44.83	\$1,369.25	3.3%
High Voltage	\$2.73	\$40.95	6.7%
Sub-transmission Voltage	\$1.76	\$11.34	15.5%
Unmetered	\$0.43	\$10.47	4.1%
CRNP	\$7.44	\$38.04	19.6%

**Table 5.4: Efficient Pricing Bounds Test**

Tariff Class	Total Avoidable Costs	Weighted Average Revenue	Total Standalone Cost
	FY16 (\$m)	FY16 (\$m)	FY16 (\$m)
Low Voltage	\$44.83	\$1,369.25	\$1,680.64
High Voltage	\$2.73	\$40.95	\$237.96
Sub-transmission Voltage	\$1.76	\$11.34	\$176.49
Unmetered	\$0.43	\$10.47	\$673.41
CRNP	\$7.44	\$38.04	\$159.02



## 6 Variations to tariffs

### RULE REQUIREMENT

*Clause 6.18.2(b)(5) of the NER requires that a pricing proposal 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*

This chapter sets out the nature and basis of any variation or adjustment to our tariffs that could occur during the course of FY16.

In the event that the Australian Competition Tribunal makes an order to vary, substitute or remit the AER's Final Determination, Ausgrid may vary the DUOS component of the interim tariffs during the course of FY16 in a manner consistent with the following:

1. Any variation to tariffs will be implemented within 20 business days after the latter of the publication of the order instructing the AER to vary the AER final determination and the AER's remaking of the determination subsequent to a Tribunal order.
2. Any variation to tariffs will be implemented as a percentage mark-up to the interim tariffs provided that:
  - a) it is in a manner calculated to recover the new annual revenue requirement during FY16.
  - b) It is in a manner calculated to ensure that the weighted average NUOS price change for any particular tariff in the period 30 June 2015 to 30 June 2016 does not exceed CPI.
3. In the circumstances where the variation to tariffs in FY16 does not produce revenue recovered during the year equal to the new annual revenue requirement as a consequence of Clause 2(b), any shortfall will be dealt with in the operation of the unders and overs account in FY17.

Ausgrid believes that this variation to the interim tariffs in the extent that the Australian Competition Tribunal makes an order to vary, substitute or remit the AER's Final Determination will ensure that our customers, retailers and other market participants make informed investment and consumption

decisions. It will also promote outcomes consistent with the National Electricity Objective (NEO) by minimising the step change in prices on 1 July 2016.

The following example assists in describing our proposed approach to vary tariffs. To keep the example as simple as possible, it is assumed that these tariffs are comprised of only a usage charge expressed on a cents per kWh basis.

The illustrative prices for these tariffs are shown in the table below.

**Table 6.1: Illustrative Example – Tariffs (c/kWh)**

	1 July 2014 (12 months)	Interim Price 1 July 2015 (6 months)	Varied Price 1 Jan 2016 (6 months)
Tariff A	2.50	2.40	2.725
Tariff B	2.50	2.50	2.625

In the example Tariff A has been reduced from 2.5 c/kWh to 2.4 cents per kWh on 1 July 2015, whereas interim price for Tariff B is unchanged from the previous financial year.

Under our proposed approach, the mark-up applied to the interim price for Tariff A would be higher than that applied to interim price for Tariff B to reflect the relative size of the interim price reductions on 1 July 2015. In making these variations to the interim tariffs, our objective is to constrain the weighted average price change to the rate of inflation for the year ending 30 June 2016.

## 7 Climate change fund

### RULE REQUIREMENT

Clause 6.18.2(b)(6A) of the NER requires that a pricing proposal must set out the amount paid as jurisdictional scheme amounts which in NSW relate to the NSW Climate Change Fund in or in respect of the relevant regulatory year and any adjustments to tariffs resulting from an over or under recovery of these amounts in any previous regulatory year. The proposal must also show the amount attributed to the recovery of the Climate Change Fund in terms of expected revenue for the relevant regulatory year

For the year ending June 2016, Ausgrid will pay around \$148.7m to the Climate Change Fund. Ausgrid expects to recover a similar amount for this purpose from network charges, as shown in the following table.

The correspondence received from the Department of Environment and Climate Change on Ausgrid's contribution to the Climate Change Fund for FY16 is provided in the attachment at the end of this document.

**Table 7.1: Overs and Unders Account Forecast Closing Balance – Climate Change Fund**

Financial Year Ending	Units	Period t-2	Period t-1	Period t
		Unaudited actual FY14	Expected FY15	Forecast FY16
Interest rate applicable to balance	%	10.02%	6.74%	6.68%
Opening balance overs/(unders)	\$'000	(2,450)	(2,826)	213
Interest on opening balance (365 days)	\$'000	(246)	(191)	14
Forecast over/(under) recover for financial year	\$'000	(124)	3,126	(220)
Interest charged on over/(under) recovery for financial year	\$'000	(6)	104	(7)
Closing balance of CCF overs/(unders) account	\$'000	(2,826)	213	(0)

## 8 Designated pricing proposal charges

### RULE REQUIREMENT

*Clause 6.18.2(b)(6) of the NER requires that a pricing proposal must set out how charges for designated pricing proposal charges (previously known as transmission use of system services and related 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. In addition, clause 6.18.7 states that recovery of designated pricing proposal charges should not exceed the estimated amount of these charges for the relevant regulatory year, once the overs and unders account has been taken into account.*

Ausgrid's Transmission Use of System (TUOS) tariffs are designed to recover the allowed revenue for our transmission network, pass through the TransGrid transmission cost to customers and to recover (return) an under (over) recovery of transmission revenues in the previous period. The process used by Ausgrid to achieve these TUOS pricing outcomes is summarised below:

Step 1: To calculate the annual amount of allowed revenue to recover for Ausgrid transmission assets;

Step 2: Ausgrid to provide this annual revenue requirement to TransGrid for inclusion in their modelling of transmission charges for the coming year;

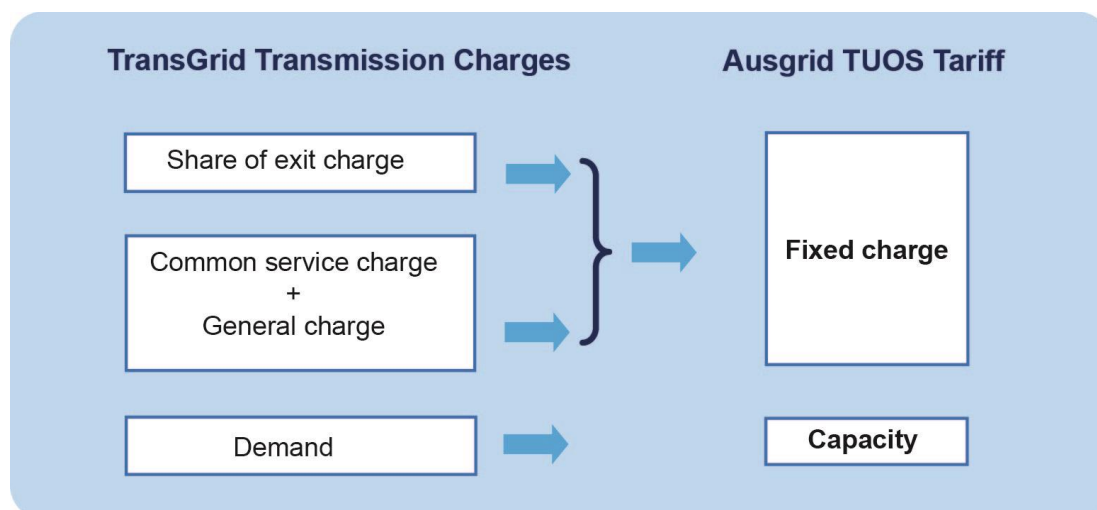
Step 3: TransGrid to provide Ausgrid with the final transmission charges for the coming year in early April, as per the Memorandum of Understanding between the two organisations.

Step 4: Ausgrid to set TUOS tariffs for the coming year to recover the forecast transmission cost plus the opening balance (positive or negative) of the transmission overs and unders account.

Ausgrid's approach to setting Transmission Use of System (TUOS) prices is based on the fundamental principle of preserving the TransGrid transmission price signal, where it is desirable to do so from an economic and equity perspective. Given the location-basis of TransGrid's transmission charges, it is only possible to preserve the transmission price signal in the TUOS component of network tariffs for Cost Reflective Network Price (CRNP) customers given the site-specific nature of these network tariffs.

As illustrated in the following figure, Ausgrid's approach to setting TUOS tariffs for CRNP customers preserves the TransGrid transmission price signal, in spite of the structural differences between the two price signals.

**Figure 8.1: Ausgrid's TUOS Pricing Structure for CRNP Customers**



While it is not possible to provide individual customers on a published network tariff with cost reflective TUOS prices due to “postage stamp” basis of these tariffs, it is possible, however, to allocate annual TUOS cost (net of CRNP TUOS recovery) to each tariff class on an equitable basis using cost allocation principles. As with any cost allocation process, this approach requires a significant degree of averaging of costs and assumptions to be made in relation to the time of use consumption and demand characteristics of tariff classes where interval consumption data does not exist.

While Ausgrid endeavours to set TUOS tariffs consistent with the cost reflectivity principle, this may not always be possible in practice given the following considerations:

- It is not possible to preserve the TransGrid<sup>8</sup> transmission price signal for customers on published network tariffs;
- The likelihood of forecast volume error;
- The requirement under Attachment 14 of the AER’s Final Decision to set TUOS tariffs to achieve a zero forecast balance of the transmission overs and unders account by the end of the year that the new prices apply. Noting that for this year’s pricing proposal Ausgrid is required to recover the full amount of its \$3.96m estimated under-recovery from the previous financial year to ensure that a zero closing balance is expected for FY 16; and
- Ausgrid’s commitment to transitioning TUOS prices to cost reflective levels, where necessary to avoid imposing unacceptable price shocks on individual customers, as discussed below.

While it is important from an economic perspective to preserve the TransGrid price signal to these customers, Ausgrid believes that it is unfair to burden any individual customer with unacceptable price shocks arising from unexpected changes in the structure of prices. It is for this reason that Ausgrid has decided to transition TUOS tariffs to cost reflective levels over a reasonable period for a number of CRNP customers.

## **Proposed improvements to our methodology for calculating cost reflective TUOS prices**

Ausgrid proposes to change the calculation method used to allocate the non-location component of TransGrid’s transmission charges to customers on an individually calculated network tariff. The current approach is to use the individual customer’s historical energy consumption. Ausgrid believes that this approach may not result in TUOS tariffs that do not equitably recover these costs, particularly in an environment where the adoption of energy-saving technologies and practices varies across the CRNP and large load sites. To address this issue Ausgrid proposes to allocate non-location costs to customers on an individually calculated tariff on the basis of the customer’s maximum demand during the peak period.

## **Unders and overs account**

The over and unders transmission account is a mechanism to ensure that if transmission revenue recovery is too high or too low in a given regulatory year, Distribution Network Service Providers, such as Ausgrid can recover the difference between actual transmission revenue and transmission payments by adjusting TUOS prices in the subsequent year. Fluctuations in revenue recovery are most likely to be caused by the impact of weather on electricity consumption and demand forecasts.

It is important to note that Ausgrid has adjusted the historical over/under recovery amount in FY13 in the table below by \$6.1m to address the doubling counting of TUOS revenue arising from using RIN data in FY13. The double count arises because the revenue reported in the RIN for FY13 includes revenue from the prior year that was already reflected in the revenue figure for FY12, which was derived on the basis of the WAPC audit.

As required under the AER Final Decision, Ausgrid has set TUOS tariffs to achieve a forecast zero balance of the overs and unders account for transmission standard control services by the end of FY16, as shown in the following table:

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<sup>8</sup> Note that TransGrid is the co-ordinating TNSP for the setting of Transmission charges in NSW



**Table 8.1: Overs and Unders Account Forecast Closing Balance – Designated Pricing Proposal Charges**

Financial Year Ending	Units	Period t-3	Period t-2	Period t-1	Period t
		Actual FY13	Actual FY14	Expected FY15	Forecast FY16
Interest rate applicable to balance	%	10.02%	10.02%	6.74%	6.68%
Opening balance over/(under)	\$'000	3,949	(27,648)	(43,577)	(3,963)
Interest on opening balance (365 days)	\$'000	396	(2,770)	(2,939)	(265)
Over/(under) recovery for financial year	\$'000	(30,502)	(12,544)	41,186	4,094
Interest charged on over/(under) recovery for financial year	\$'000	(1,492)	(613)	1,366	135
Closing balance of transmission overs/(unders) account	\$'000	(27,648)	(43,577)	(3,963)	(0)

## 9 Distribution use of system unders and overs account

### AER FINAL DECISION

*To demonstrate compliance with its distribution determination in the 2015–19 regulatory control period, Ausgrid must maintain a DUOS unders and overs account in its annual pricing proposal under clause 6.18.2(b)(7) of the NER.*

*Ausgrid must provide details of calculations in the format set out in table 14.2 of Attachment 14 of AER's Final Decision.*

*In proposing variations to the amount and structure of DUOS charges, Ausgrid is to achieve an expected zero balance on their DUOS unders and overs accounts in each forecast year in its annual pricing proposals in the 2015–19 regulatory control period.*

As a consequence of the AER's decision to apply a revenue cap form of control mechanism to Ausgrid's standard control distribution services in the 2015-19 regulatory control period, Ausgrid is required under Attachment 14 of AER's Final Decision to maintain a overs and unders account for our Distribution Use of System (DUOS) revenue.

In simple terms, the purpose of the overs and unders account is to ensure that Ausgrid complies with the revenue cap control mechanism setting DUOS tariff in each year to recover the forecast (smoothed) annual revenue requirement, plus an adjustment to recover (return) an under (over) recovery of DUOS revenues in the previous period.

As required under the AER Final Decision, Ausgrid has set DUOS tariffs for FY16 to achieve a forecast zero balance of the overs and unders account for distribution standard control services by the end of FY16, as shown in the following table:

**Table 9.1: Overs and unders account forecast closing balance – Distribution Use of System**

Financial Year Ending	Units	Period t-1	Period t
		Expected FY15	Forecast FY16
Interest rate applicable to balance	%	6.74%	6.68%
Opening balance over/(under)	\$'000	-	39,830
Interest on opening balance (365 days)	\$'000	-	2,661
Over/(under) recovery for financial year	\$'000	38,552	(41,139)
Interest charged on over/(under) recovery for financial year	\$'000	1,279	(1,352)
Closing balance of transmission overs/(unders) account	\$'000	39,830	(0)

## 10 Changes from the previous regulatory year

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### RULE REQUIREMENT

*Clause 6.18.2(b)(8) of the NER requires that 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*

July 2015. For more information on our proposed Type 5 and 6 metering charges, refer Chapter 16 of this document.

This chapter sets out the principal changes since the previous regulatory year, and demonstrates that these changes comply with our regulatory obligations under the NER and the AER Determination.

### **Description of the nature and extent of change from previous regulatory year**

Ausgrid proposes to introduce a declining block tariff structure for residential and small business customers from 1 July 2015.

Ausgrid also proposes to re-assign customers in FY16 that are no longer eligible to remain assigned to their existing tariff class or individual network use of system tariff.

To ensure that customers impacted do not receive unacceptable network use of system bill outcomes, Ausgrid proposes to adopt a transitional network use of system tariff arrangements for these sites in FY16.

Under the proposed transitional arrangements, sites that are no longer eligible to remain assigned to their existing network tariff will be re-assigned to a transitional network tariff in FY16. This approach will ensure that Ausgrid will comply with our pricing policies and our obligations under the AER Final Decision in a manner that does not result in our customers receiving unacceptable bill shocks i.e. in excess of CPI. For more information about Ausgrid's proposed transitional tariff arrangements for FY16, refer to chapter 11 of this document for more information.

As required under the AER Final Decision, Ausgrid has introduced a metering charge for residential and small business customers on 1

# 11 Proposed new network tariffs

Ausgrid proposes to introduce a number of transitional network use of system tariffs in FY16. This will ensure that Ausgrid is able to effectively manage the equity issues that arise in the situation where a site is required under our policies and the AER Final Decision to be re-assigned to another tariff class and to another network use of system tariff within their existing tariff class.

Importantly, the proposed transitional network use of system tariffs for FY16 are designed to comply with the pricing principles set out in chapter 6 of the NER.

## Transitional Pricing Arrangements for Customers currently on a Published Network Tariff in FY16

In addition to the proposed tariff class re-assignments for the CRNP sites, Ausgrid also proposes to introduce a number of transitional network use of system tariffs in FY16 to ensure that the customers currently on a published network tariff that are required to re-assign to another tariff class do not receive an unacceptable network bill impact in FY16. The proposed transitional network tariffs introduced for this purpose are set out in the table below:

**Table 11.1: Proposed Non-CRNP Tariff Class Re-assignments in FY16**

Proposed Transitional Tariff	Proposed Re-assignment	
	From Tariff Class	To Tariff Class
Transitional HV Tariff	High Voltage	Low Voltage
Transitional STV Tariff	Sub-Transmission Voltage	Low Voltage
		High Voltage
Transitional LV Tariff A	Low Voltage (EA302)	Sub-transmission Voltage (390)
		High Voltage (370)
Transitional LV Tariff B	Low Voltage (EA305)	High Voltage (370)
Transitional LV Tariff C	Low Voltage (EA310)	High Voltage (370)

Given that there is a potential for only one retail customer to be assigned to a transitional network

use of system tariff during the course of FY16, and that it is not Ausgrid's intention to allow customers to elect to be re-assigned to these tariffs, Ausgrid proposes to not publish these transitional network use of system tariffs in our price list and our website.

## Transitional Pricing Arrangements for sites impacted by the proposed change in CRNP criteria in FY16

As discussed in chapter 3 of this document, Ausgrid proposes to change the eligibility criteria for the CRNP tariff class. Ausgrid has identified 59 sites that are currently assigned to the CRNP tariff class that do not satisfy the proposed eligibility criteria for this tariff class. As a consequence of this proposal, Ausgrid is required to include in the annual pricing proposal for FY16 the associated tariff class re-assignments for these CRNP sites.

Importantly, Ausgrid is required to follow the tariff class assignment and re-assignment procedure set out in Attachment 14 of the AER Final Decision, which involves notifying retailers of proposed tariff class re-assignments and dealing with any objections and complaints raised by the relevant parties.

Given that there is the potential for this process to take a considerable amount of time, particularly if a CRNP customer objects to the proposed re-assignment to another tariff class, Ausgrid proposes to keep the existing CRNP customers that no longer satisfy the criteria on their individually calculated network use of system tariffs in the CRNP tariff class until the tariff class re-assignment process has been completed and a final decision on the tariff class re-assignment has been made.

This will require that Ausgrid introduces on 1 July 2015 a transitional network use of system tariff for each of the 59 sites that no longer satisfy the CRNP criteria. To ensure that the proposed re-assignment of these sites from the CRNP tariff class to a more appropriate tariff class does not result in unacceptable network bill outcomes, Ausgrid proposes to transition these tariffs to cost reflective levels over a reasonable timeframe. Please refer to Attachment A for more information on Ausgrid's proposed tariff-setting methodology for the CRNP sites and the sites on a transitional network use of system tariff.

Ausgrid's proposed individually calculated network use of system tariff for FY16 are set out in a confidential attachment.

## 12 Annual system of assessment and review of tariffs

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Clause 16 of Appendix D of Attachment 14 of the AER Final Decision requires that Ausgrid set out in its annual pricing proposal a method by which it will review and assess the basis on which a retail customer is charged for tariffs, where the basis of charge varies according to the retail customer's usage or load profile.

### **Scope of annual review and assessment**

Ausgrid proposes to exclude the unmetered retail customers from the annual review and assessment of the basis for which a retail customer is charged for tariffs. This proposal to limit the scope of the annual review and assessment is based on the network tariff arrangements applying to these sites being similar to a fixed charge in nature due to the absence of metering at these sites. In other words, the network use of system billing outcome for these sites is not influenced by variations in the actual extent of the network usage at these sites.

### **Proposed method of assessment and review of the basis on which a retail customer is charged**

Ausgrid's proposed methodology for assessing and reviewing the tariff arrangements of retail customers in Ausgrid's network area involves the following two aspects:

1. Assessment and review to ensure that the retail customer is currently assigned to the correct network tariff class.
2. Assessment and review to ensure that the retail customer is currently assigned to the correct network use of system tariff.

Both of these aspects to Ausgrid's proposed method of assessment and review of tariff arrangements are discussed in detail below:

### **AER procedure for re-assigning a retail customer to another tariff class**

Ausgrid is required to comply with the tariff class re-assignment procedure set out in Attachment 14 of the AER Final Decision. To comply with this procedure, Ausgrid is required to undertake an annual assessment of the nature of each retail customer's connection (i.e. type and voltage of the metering point) and usage of the network over the past 12 months on the basis of volume data as at 31 December.

If Ausgrid discovers that the voltage of the supply to the premise as measured at the metering point changes to the extent that they are no longer eligible to remain in their current tariff class, Ausgrid is required to re-assign these sites to an appropriate tariff class for the purposes of the next annual pricing proposal.

### **Proposed Tariff Class re-assignments in FY16**

Ausgrid proposes to include a number of tariff class re-assignments in its annual pricing proposal for FY16. These proposed tariff class re-assignments are required as an outcome of the following:

- Ausgrid's proposed change in the eligibility criteria for the CRNP tariff class
- The annual assessment and review of existing sites undertaken as part of the annual pricing proposal process for FY16.

### ***Customers impacted by proposed change to CRNP Criteria***

The proposed change in the eligibility criteria for the CRNP tariff class will result in many of the customers currently assigned to the CRNP tariff class no longer being eligible to remain in this tariff class. The table below provides a summary of the proposed tariff class re-assignments associated with the existing CRNP sites in FY16.

**Table 12.1: Proposed CRNP Tariff Class Re-assignments**

Proposed CRNP Tariff Class Re-assignment in FY16	No. of customers
To High Voltage Tariff Class	6
To Sub-transmission Voltage Tariff Class	53
Remain in CRNP Tariff Class	6

To avoid imposing unacceptable network bill impacts on these retail customers, Ausgrid proposes to re-assign many of these sites to an individually calculated transitional tariff within their appropriate tariff class in FY16. For more information on the proposed transitional tariff arrangements for retail customers impacted by our proposed change in the CRNP criteria, please refer to chapter 3 of this document.

**Customers impacted by Annual Assessment and Review at Tariff Class level**

Ausgrid has undertaken an annual review of voltage level characteristics of existing sites to assess whether they are eligible to remain assigned to their existing tariff class. As a result of this review, Ausgrid proposes to include the following tariff class re-assignments in addition to those proposed for the CRNP sites in the annual pricing proposal for FY16, see table below:

**Table 12.2: Proposed Published Tariff Class Re-assignments in FY16**

Tariff Class		Number of Customers
Current (FY15)	Proposed (FY16)	
High Voltage	Low Voltage	7
Sub-transmission	Low Voltage	1
	High Voltage	5
Low Voltage	Sub-transmission	1
	High Voltage	7

Ausgrid proposes to re-assign these sites to a transitional tariff within their appropriate tariff

class in FY16. This will ensure that the retail customers do not receive an unacceptable network bill impact as a consequence of our proposal to re-assign these sites to an appropriate tariff class in FY16. For more information on the transitional tariff arrangements for, please refer to chapter 11 of this document.

**Proposed tariff re-assignments in FY16**

For retail customers that have been assessed as being currently assigned to an appropriate tariff class, Ausgrid then undertakes an annual assessment and review of whether these sites are currently assigned to the correct network use of system tariff.

Ausgrid has undertaken an annual assessment and review of network use of system tariff arrangements on the basis of the relevant historical data on the extent of their network usage for each retail customer.

To avoid unnecessary transaction costs associated with assigning customers to a new network tariff class associated with temporary changes to network usage, Ausgrid proposes to only re-assign an existing retail customer to another network use of system tariff as part of the annual pricing proposal if the retail customer is found to have not satisfied the extent of network usage eligibility criteria associated with their current network use of system tariff in each of the previous two financial years.<sup>9</sup>

As a result of undertaking the annual review and assessment at the tariff level, Ausgrid has identified a significant number of sites currently on the small business TOU (EA225) tariff that are no longer eligible to remain on this tariff given the historical extent of their network usage, as shown in the table below.

**Table 12.3: Proposed Tariff Re-assignments in FY16**

Network Use of System Tariff		Number of Customers
Current	Legitimate	
<b>EA225 Small Business TOU Tariff</b>	EA302 Low Voltage TOU Capacity Tariff	5,016
	EA305 Low Voltage TOU Capacity Tariff	53

<sup>9</sup> The eligibility criteria for Ausgrid's published network use of system tariffs are set out in our network pricing policy (ES7) document, which is available from [www.ausgrid.com.au](http://www.ausgrid.com.au)



It is important to note that if Ausgrid were to assign these sites to their correct network tariff in FY16, it will result in some of these customers receiving unacceptable network bill outcomes. To address this concern, Ausgrid proposes to re-assign these sites to an appropriate transitional

network use of system tariffs in FY16. Please refer to chapter 11 of this document for more information on the transitional tariff arrangements.

## 13 D-factor

The AER Final Decision allows Ausgrid to recover our entitlement under the D-factor mechanism from customers in FY16. This chapter provides an understanding of how Ausgrid has calculated the D-factor adjustment to overall revenue.

### Inclusion of the D-factor amount in the B-factor in the Control Mechanism

The AER Final Decision allows Ausgrid to recover the remaining expenditure arising under the D-factor scheme through the B-factor parameter in the revenue cap control mechanism formula<sup>10</sup> for standard control distribution services.

### Background

The D-factor scheme was established to provide incentives for electricity distribution networks to implement efficient demand management and operated during the 2009-14 Regulatory period. The AER Final Decision for 2014-19 closed the scheme as of 1 July, 2014. D-factor expenditure and foregone revenue is approved by the AER and recovered on a two year lag. Approved D-factor scheme costs in 2012-13 were not recovered in 2014-15 prices due to the Transitional distribution decision by the AER for 2014-15. Ausgrid proposes to recover approved costs and foregone revenue for 2012-13 and 2013-14 in 2015-16. Ausgrid's annual D-factor reports are published on the AER's website.

### Proposed D-factor amount to be recovered from customers in FY16

Total D-factor costs and foregone revenue approved by the AER for 2012-13 and 2013-14 is \$2,132,315. Adjusted for 2015-16 \$, the D-factor adjustment is \$2,647,559.

Costs in 2012-13 and 2013-14 have been adjusted into 2015-16 \$ terms in line with the AER's D-factor methodology using the nominal WACC for 2012-13, 2013-14 and 2014-15.

### Explanation of the calculation

The following tables provide the inputs used by Ausgrid to calculate the proposed D-factor amount of \$2,647,559 to be included in the annual pricing proposal for FY16.

**Table 13.1: Proposed D-Factor Approved Costs for FY13 - FY16 Dollars**

Cost Calculation for FY13	Approved Costs (FY13)	\$1,219,240
	Nominal WACC (FY13)	10.02%
	Nominal WACC (FY14)	10.02%
	Nominal WACC (FY15)	6.74%
	Total Costs (FY16 dollars)	\$1,575,287

**Table 13.2: Proposed D-Factor Approved Costs for FY14 - FY16 Dollars**

Cost Calculation for FY14	Approved Costs (FY14)	\$913,075
	Nominal WACC (FY14)	10.02%
	Nominal WACC (FY15)	6.74%
	Total Costs (FY16 dollars)	\$1,072,273

<sup>10</sup> AER Final Decision, 2015, Attachment 14: Control Mechanism, p14-12, April

## 14 Public lighting

Public lighting services are classified as alternative control services and are subject to a different control mechanism to general network services which are classified as standard control services.

Public lighting services encompass the provision, construction and maintenance of public lighting and emerging public lighting technology. Ausgrid provides public lighting services to over 100 customers including councils, community groups and government associations. There are over 240,000 public lights in Ausgrid's network area, which are typically installed on major and minor roadways. A conventional public light comprises of five (5) main components: a lamp, a luminaire, a bracket, a support structure, and a connection to the low voltage electricity network.

### Tariffs and tariff classes

All public lighting customers are subject to the tariffs in the AER Final Decision and therefore are defined to be a single tariff class.<sup>11</sup>

### Form of Control Mechanism

As set out in the AER Framework and Approach Paper, the AER's Final Decision is to apply a price cap form of control to public lighting in the 2015-19 regulatory control period.<sup>12</sup>

The control mechanism formula for public lighting is set out below:

$$\bar{p}_i^t \geq p_i^t \quad i=1, \dots, n \text{ and } t=1, 2, 3, 4$$

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

Where:

$\bar{p}_i^t$  is the cap on the price of service i in year t. However, for 2015–16 this is the price as determined by the AER.

$p_i^t$  is the price of service i in year t.

$$\Delta CPI_t = \left[ \frac{CPI_{Mar,t-2} + CPI_{Jun,t-2} + CPI_{Sep,t-1} + CPI_{Dec,t-1}}{CPI_{Mar,t-3} + CPI_{Jun,t-3} + CPI_{Sep,t-2} + CPI_{Dec,t-2}} \right] - 1$$

**CPI** means the all groups index number for the weighted average of eight capital cities as published by the ABS, or if the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best estimate of the index.

**X<sub>i</sub><sup>t</sup>** is the value of X for the year t in the regulatory control period. There are no X-factors for public lighting.

**A<sub>i</sub><sup>t</sup>** is an adjustment factor likely to include, but not limited to, adjustments for residual charges when customers choose to replace assets before the end of their economic life. For public lighting we consider the value for A is zero.

### Public Lighting Prices for FY 2015/16

The AER Final Decision on the public lighting prices for FY 2015/16 are shown in the attachment at the end of this document.

<sup>11</sup> Tariff class: A class of customers for one or more *direct control services* who are subject to a particular tariff or particular tariffs.

<sup>12</sup> AER, Stage 1 Framework and approach paper, Ausgrid, Endeavour Energy and Essential Energy, Transitional regulatory control period 1 July 2014 to 30 June 2015 & Subsequent regulatory control period 1 July 2015 to 30 June 2019.

## 15 Ancillary network services

### Background

Ancillary network services are non-routine services that are provided by a DNSP to individual customers on an “as needs” basis. These services are classified by the AER as alternative control services and do not form part of the DNSP’s distribution use of system revenue requirement determined by the AER. Rather, the DNSP recovers the costs of providing alternative control services through a range of fees.

### Tariff Classes

There are two classes of ancillary network services

**Fee-based Service** – these are ancillary network services that DNSPs provide to individual customers where the AER determines the fee. These fees are fixed and apply irrespective of the actual time taken to perform the service.

**Quoted Services** – these are ancillary network services that DNSPs provide to individual customers where the cost of these services will depend on the actual time taken to perform the service.

### Form of Control Mechanism

As set out in the AER Framework and Approach Paper, the AER’s Final Decision is to apply a price cap form of control to both fee-based and quoted ancillary network services.<sup>13</sup>

**Figure 15.1: Control mechanism formula for fee-based services**

$$\bar{p}_i^t \geq p_i^t$$

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

Where:

$\bar{p}_i^t$  is the cap on the price of fee-based service i in year t. However, for 2015–16 this is the price as determined by the AER Final Decision escalated by  $\Delta CPI$  and the X-factor.

$p_i^t$  is the price of service i in year t.

$X_i^t$  is the value of X for the year t in the regulatory control period, as determined by the AER.

$$\Delta CPI_t = \left[ \frac{CPI_{Mar,t-2} + CPI_{Jun,t-2} + CPI_{Sep,t-1} + CPI_{Dec,t-1}}{CPI_{Mar,t-3} + CPI_{Jun,t-3} + CPI_{Sep,t-2} + CPI_{Dec,t-2}} \right] - 1$$

$CPI$  means the all groups index number for the weighted average of eight capital cities as published by the ABS, or if the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best estimate of the index.

**Figure 15.2: Control mechanism formula for quoted services**

$$\bar{p}_i^t = L_t + C_t + M_t$$

Where:

$\bar{p}_i^t$  is the cap on the price of quoted service i in year t.

$L_t$  is the maximum hourly charge out rate including on-costs and overhead. Labour is escalated annually using the following formula:

$$L_t = (1 - X_t)(1 + \Delta CPI_t)$$

$C_t$  is the contractor services (including overheads) in the provision of quoted service i in year t. Contractor services are escalated annually by  $\Delta CPI$ .

$M_t$  is the cost of materials directly incurred in the provision of quoted service i in year t.

<sup>13</sup> AER, Stage 1 Framework and approach paper, Ausgrid, Endeavour Energy and Essential Energy, Transitional regulatory control period 1 July 2014 to 30 June 2015 & Subsequent regulatory control period 1 July 2015 to 30 June 2019

### X-factors

The X-factors set out in the AER Final Decision for fee-based and quoted ancillary services for each year of the 2015-19 regulatory control period are shown in table below.

**Table 15.1: X-factors for Ancillary Network Services**

Class	FY16	FY17	FY18	FY19
Fee-based	-1.02	-1.07	-1.11	-1.10
Quoted Services	-1.02	-1.07	-1.11	-1.10

### AER's Final Decision on Maximum Allowed Total Labour Rates

The maximum allowed total labour rates set out in the AER Final Decision to different types of labour used by Ausgrid to deliver ancillary network services are shown in the table below:

**Table 15.2: AER Approved Hourly Labour Rates - \$FY15 Dollar terms**

Category	Description	Max. Labour Rates
Admin	Admin Support	89.06
Technical	Technical Specialist R2	142.81
Engineer	EO7/engineer	166.44
Field worker	Field worker R4	132.40
Senior Engineer	Senior engineer	210.96

Refer to attachment at this end of this document for the AER Final Decision on the price cap for ancillary network services provided by Ausgrid in FY 2015/16.

## 16 Type 5 and 6 metering charges

### Background

The AER classified Type 5 and 6 metering services provided by Ausgrid and the other NSW DNSPs as alternative control services and do not form part of the DNSP's distribution use of system revenue requirement determined by the AER. Rather, the DNSP recovers the costs of providing these alternative control services through a range of metering charges.

### Tariff Classes

In light of the alignment between the metering charge and the network tariff, Ausgrid proposes to constitute its tariff classes on the basis of network tariff structure, as summarised below:

- Residential and Small Business Block Tariffs
- Residential and Small Business Time of Use tariffs
- Medium Business Type of Use Capacity Tariff.<sup>14</sup>

### Form of Control Mechanism

As set out in the AER Framework and Approach Paper, the AER's Final Decision is to apply a price cap form of control mechanism to this alternative control service in the 2015-19 Regulatory control period.<sup>15</sup>

Under a price cap form of control, a schedule of prices is set for the first year. For the following years the previous year's prices are adjusted by CPI and an X-factor. The control mechanism formula is set out below:

$$\bar{p}_i^t \geq p_i^t \quad i=1,\dots,n \text{ and } t=1,2,3,4$$

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

Where:

$\bar{p}_i^t$  is the cap on the price of service i in year t. However, for 2015–16 this is the price as set out in Attachment 16 of the AER Final Decision.

$p_i^t$  is the price of service i in year t.

$$\Delta CPI_t = \left[ \frac{CPI_{Mar,t-2} + CPI_{Jun,t-2} + CPI_{Sep,t-1} + CPI_{Dec,t-1}}{CPI_{Mar,t-3} + CPI_{Jun,t-3} + CPI_{Sep,t-2} + CPI_{Dec,t-2}} \right] - 1$$

**CPI** means the all groups index number for the weighted average of eight capital cities as published by the ABS, or if the ABS does not or ceases to publish the index, then CPI will mean an index which the AER considers is the best estimate of the index.

$X_i^t$  is for the annual metering charges and the upfront capital charges, as set out in Attachment 16 of the AER Final Decision and as summarised in the table below.

### X-factors

The X-factors set out in the AER Final Decision for annual metering charges and the up-front capital charges for the relevant years of the 2015-19 regulatory control period are shown in the table below. No X-factor applies for the calculation of prices for 1 July 2016.

**Table 16.1: X-factors for the annual metering charges**

Class	FY17	FY18	FY19
Annual Metering Charge	1.89	1.89	1.89
Upfront capital charge	0.0	0.0	0.0

### Structure of metering charges

The AER Final Decision approves two types of charges for the provision of Type 5 and 6 metering services in the 2015-19 regulatory control period:

- Upfront capital charge (for all new and upgraded meters installed after 1 July 2015).
- Annual Charge comprising two components:
  - Capital – metering asset base recovery
  - Non-capital – operating expenditure and tax.

<sup>14</sup> Ausgrid 2014, Attachment 8.21, Ausgrid's Regulatory proposal, Energia's review of Ausgrid's Proposed Metering Arrangements, Energia, April, p.53

<sup>15</sup> AER, Stage 1 Framework and approach paper, Ausgrid, Endeavour Energy and Essential Energy, Transitional regulatory control period 1 July 2014 to 30 June 2015 & Subsequent regulatory control period 1 July 2015 to 30 June 2019



## AER Final Decision on Type 5 and 6 Metering Charges

The proposed annual metering charge and up-front capital charge for Type 5 and 6 metering services provided by Ausgrid in FY16 are shown in the tables below and the attachment at the end of this document.

**Table 16.2: Annual metering charges for FY16 by Tariff**

Tariff class	Costs	\$ nominal per annum
Residential inclining block	Non-capital	\$9.75
	Capital	\$20.04
Residential TOU	Non-capital	\$25.20
	Capital	\$22.31
Controlled load	Non-capital	\$0.82
	Capital	\$11.13
Small business inclining block	Non-capital	\$10.06
	Capital	\$30.64
Small business TOU	Non-capital	\$24.97
	Capital	\$21.29
LV 40–160MWh TOU (system)	Non-capital	\$44.44
	Capital	\$27.72
Generator tariff	Non-capital	\$2.59
	Capital	\$11.49

**Table 16.3: Up-front Meter charges for FY16**

Meter description	Meter code	\$ nominal
Single phase single element two wire direct connected accumulation watt-hour meter	B1	\$47.18
Three phase single element four wire direct connected accumulation watt-hour meter	B3	\$122.64
Single phase single element two wire direct connected interval watt-hour meter	E1	\$114.96
Single phase dual element two wire direct connected interval watt-hour meter	E2	\$175.50
Three phase single element four wire direct connected interval watt-hour meter	E3	\$237.28
Three phase single element CT connected interval watt-hour meter	E4	\$572.98

## 17 Attachments

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Attachments have been included with this pricing proposal as follows:

Attachment	Disclosure	Description
<b>A</b>	CONFIDENTIAL	Cost reflective Network Price TUOS Arrangements
<b>B</b>	CONFIDENTIAL	Interim Individually Calculated Network Use of System Tariffs
<b>C</b>	CONFIDENTIAL	Customer Bill Information for Public Lighting Customers
<b>D</b>		Price Information for Public Lighting Tariffs
<b>E</b>	CONFIDENTIAL	Completed Compliance Spreadsheet
<b>F</b>		Notification of Climate Change Fund Contribution
<b>G</b>		TransGrid's Transmission Charges for FY16
<b>H</b>		Pricing Information for Ancillary Network Services
<b>I</b>		Pricing Information for Type 5 and 6 Metering Services
<b>J</b>	CONFIDENTIAL	Long Run Marginal Cost Model
<b>K</b>	CONFIDENTIAL	Avoidable and Standalone Cost Model
<b>L</b>		Pricing Compliance Model for Alternative Control Services
<b>M</b>	CONFIDENTIAL	Pricing Compliance Model for Public Lighting Customer

## Attachment A: Cost Reflective TUOS Pricing Arrangements

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This attachment explains Ausgrid's proposed approach to setting Transmission Use of System (TUOS) tariffs in FY16 for the customers that are currently assigned to the CRNP tariff class, noting that some of these customers will no longer be eligible to remain in the CRNP tariff class if they do not satisfy our proposed CRNP eligibility criteria.

### **Rationale for the proposed change to our cost reflective pricing arrangements**

Under Ausgrid's current cost reflective pricing arrangements, Ausgrid is required to re-assign a site in our network area to the Cost Reflective Network Price (CRNP) tariff class if they satisfy our extent of network usage (>10 MW or 40 GWH pa).<sup>16</sup> As explained to the AER in our revised regulatory proposal, Ausgrid is concerned that the current CRNP eligibility criteria will result in unacceptable economic and equity outcomes for large load customers with unstable patterns of network usage over time.<sup>17</sup> These concerns arise because Ausgrid is compelled under the AER Final Determination to re-assign a CRNP site to another tariff class if the extent of their network usage falls outside the  $\pm 20\%$  tolerance limit applied to the eligibility criteria for the CRNP tariff class, even if this reduction is expected to be only temporary in nature.

It is also difficult for Ausgrid to justify the continuation of our current CRNP pricing approach given the resources expended to maintain and operate a complex distributed cost of supply model for the purpose of setting cost reflective network use of system tariffs for only around 60 sites, particularly in light of the severe cut-back to our revenue allowance under the AER Final Decision.

While Ausgrid appreciates the AER's final decision to apply a  $\pm 20\%$  tolerance limit to assessing eligibility for the CRNP tariff class, Ausgrid believes that this level of discretion is not sufficient to address our concerns. It is for this reason that Ausgrid proposes to adopt new pricing arrangements for individually calculated network use of system tariffs in FY16.

### **Overview of proposed approach to the setting of site-specific network tariffs in FY16**

To address the concerns with our current approach, Ausgrid proposes to introduce a new approach to the setting of site-specific network tariffs in FY16. The key elements of this proposed approach are set out below:

The proposed change to the eligibility criteria for the CRNP tariff class, as discussed in chapter 3 of this document.

The proposed introduction of an eligibility criteria to apply to customers that are not eligible to be assigned to the CRNP tariff class, but due to the extent of their network usage, are eligible to be re-assigned to an individually calculated tariff within their appropriate tariff class. This tariff is based on the relevant standard prices for the DUOS and CCF components and individually calculated prices for the TUOS component developed in accordance with our cost reflective TUOS pricing methodology.<sup>18</sup>

Ausgrid has developed transitional pricing arrangements to ensure that the existing CRNP customers do not receive an unacceptable network bill shock as a consequence our proposed change in cost reflecting pricing arrangements, as discussed in chapter 11 of this document.

An understanding of our proposed approach to large load and CRNP sites is provided by the figure below:

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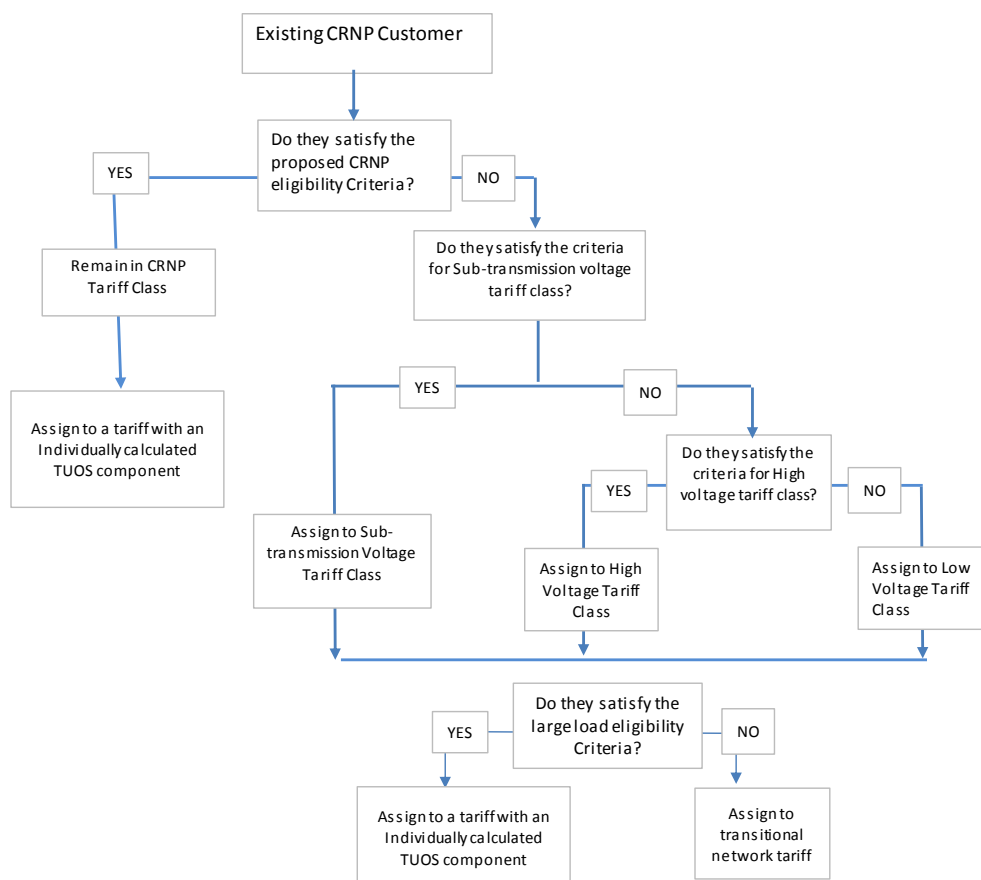
<sup>16</sup> Ausgrid 2013, ES7 Application of Network Use of System Charges, Clause 13.1, July, p.39

<sup>17</sup> Ausgrid, 2015, Revised Regulatory Proposal, Attachment 9.02, Proposed Procedure for Assignment or Re-Assignment of Retail Customers to Tariff Classes, January, p.5

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<sup>18</sup> Note – Ausgrid may vary the DUOS component prices of the individually calculated network tariff to account for any capital contribution made by the customer.

Figure A1.1: Overview of Ausgrid's Proposed Tariff Assignment Procedure for CRNP sites and sites that satisfy our eligibility criteria for Large Loads



### Proposed change to the eligibility criteria for the CRNP Tariff Class

Ausgrid proposes to address concerns with the current approach by changing the CRNP eligibility criteria from an extent of network usage basis to a connection characteristic basis, as summarised in the Table A1.1 below and discussed in Chapter 3 of this document.

The proposed change in the eligibility criteria for the CRNP tariff class will result in many of the customers currently assigned to the CRNP tariff class no longer being eligible to remain in this tariff class.

### Proposed large load eligibility criteria for an individually calculated site specific tariff

As a consequence of the proposed change to the CRNP eligibility criteria, Ausgrid notes that some of the existing CRNP sites will no longer be eligible to remain in the CRNP tariff class. Ausgrid believes that it is in the

long-term interests of all electricity users that these sites continue to receive an individually calculated TUOS component based on the principles of cost reflectivity where the economic benefits are likely to exceed the economic costs of doing so. To ensure that an appropriate balance is struck between the costs and complexity of providing customised price signals with the economic benefits of doing so, Ausgrid proposes to only allow distribution-connected customers to be re-assigned to an individually calculated network tariff if they satisfy at least one the following extent of network usage criteria:

Have a monthly demand measured at the nominated connection point of 10 MW or more, or

Have a recorded demand history of 10 MW or more in at least three months over the 12 month period prior to the assessment, or

Have an annual consumption that exceeds 40 GWh.<sup>19</sup>

It is important to note that existing CRNP sites that do not satisfy the above-mentioned criteria, Ausgrid proposes to re-assign these sites to a transitional network use of system tariff in FY16. It is Ausgrid's intention to transition these sites to a standard published network use of system tariff over a reasonable time frame, except where the transmission pricing for the site is subject to a prudential discount.<sup>20</sup>

**Table A1.1: Ausgrid's Proposed CRNP Eligibility Criteria**

Existing CRNP Criteria	Proposed CRNP Criteria
Applicable to connections at any voltage that use more than 10 MW of electricity demand on at least three occasions over a 12 month period or consume more than 40 GWh over a 12 month period.	Applicable to a site that is directly connected to Transmission Connection Point (TCP) in Ausgrid's network area. <sup>21</sup>

### **Proposed transitional arrangements for CRNP sites and sites re-assigned to an individually calculated site specific tariff**

Ausgrid is required to comply with the procedure set out in Attachment 14 of the AER Final Decision in respect to the proposed tariff class re-assignment of the existing CRNP sites that do not satisfy the proposed new eligibility criteria for the CRNP tariff class, as explained in chapter 3 of this document.

Given that there is the potential for this process to take a considerable amount of time, particularly if a CRNP customer objects to the proposed re-assignment to another tariff class, Ausgrid proposes to keep the existing CRNP customers that no longer satisfy the criteria on their individually calculated network use of system tariffs in the CRNP tariff class until the tariff class re-assignment process has been completed and a final decision on the tariff class re-assignment has been made. This will require that Ausgrid introduce on 1 July 2015 a transitional network use of system tariff for each of the 59 sites that no longer satisfy the CRNP criteria.

To ensure that the proposed re-assignment of these sites from the CRNP tariff class to a more appropriate tariff class does not result in unacceptable network bill outcomes, Ausgrid proposes to transition these tariffs to cost reflective levels over a reasonable timeframe. The proposed level and structure of the proposed transitional network use of system tariffs for these sites are set out in the confidential attachment at the end of this document.

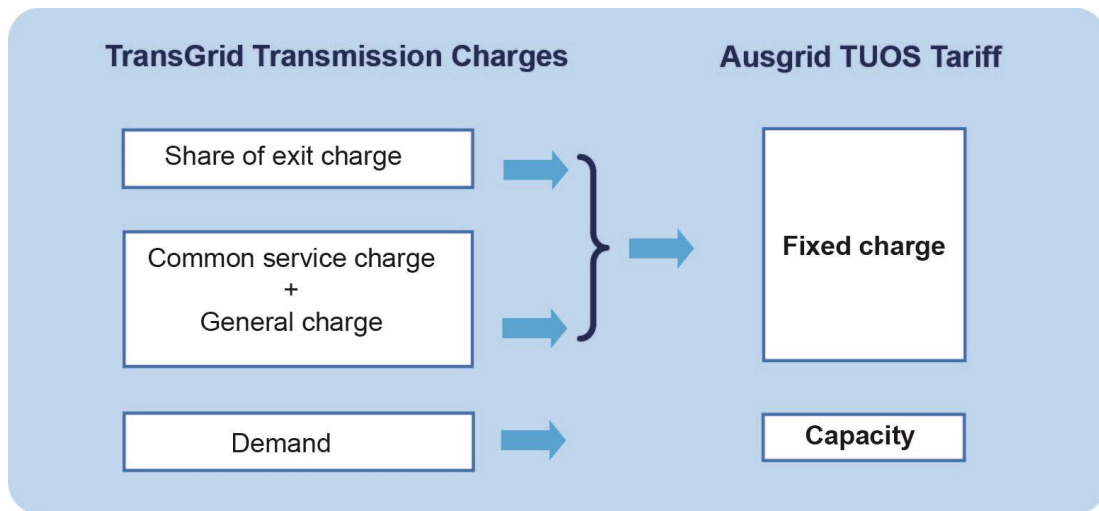
### **Proposed Cost Reflective TUOS Pricing Methodology for CRNP sites and sites re-assigned to an individually calculated site specific tariff**

As explained in chapter 8 of this document, Ausgrid's approach to preserving the TransGrid transmission price signal for customers on an individually calculated network use of system tariff is illustrated in the figure below:

<sup>19</sup> Note: Ausgrid may at its discretion assess the eligibility for an individually calculated site specific tariff on an aggregated basis in the case of a traction load site with a private network with multiple connection points to Ausgrid's electricity network.

<sup>20</sup> AER 2015, Final Decision, Ausgrid distribution Determination 2015-16 to 2018-19, Attachment 19 - Pricing Methodology. This document is available from [www.aer.gov.au](http://www.aer.gov.au)

<sup>21</sup> Note: To be eligible for the CRNP tariff class, the site must not require the use of any distribution assets.



Ausgrid believes that this proposed approach to calculating the transmission-related component of the network use of system tariff will deliver an appropriate level of cost reflectivity to customers given the need to balance the economic benefits

from introducing more cost reflective price signals against the need to avoid unnecessary transaction costs that arise from greater complexity in the calculation and structure of tariffs



## **Attachment B: Interim Individually Calculated Network Use of System Tariffs CONFIDENTIAL**

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This price list is attached a separate file named:

Attachment B - Interim Individually Calculated Network Use of System Tariffs  
CONFIDENTIAL.pdf

## **Attachment C: Customer Bill Information for Public Lighting Customers CONFIDENTIAL**

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This attachment is a separate file named:

Attachment C - Public Lighting Customer Bills – CONFIDENTIAL.PDF

## **Attachment D: Price Information for Public Lighting Tariffs**

This attachment is a separate file named:

Attachment D - Price Information for Public Lighting Tariffs.pdf

## **Attachment E: Completed Compliance Spreadsheet CONFIDENTIAL**

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This attachment is a Microsoft Excel spreadsheet named:

Attachment E - Completed Compliance Spreadsheet CONFIDENTIAL.xls

## Attachment F: Notification of Climate Change Fund Contribution

To:  
Cc:  
Bcc:  
Subject: Fw: TRIM: D15/290269 - RE: Climate Change Fund contributions - forward estimates

From: Scott Dowdell <Scott.Dowdell@environment.nsw.gov.au>  
To: Garry Foo <gfoo@ausgrid.com.au>  
Cc: Robert Telford <RTelford@ausgrid.com.au>, Patrick Gannon <pgannon@ausgrid.com.au>, Anthony Dann <Anthony.Dann@environment.nsw.gov.au>, Scott Nicholson <Scott.Nicholson@environment.nsw.gov.au>, Erin Harwood <Erin.Harwood@environment.nsw.gov.au>  
Date: 01/05/2015 05:42 PM  
Subject: TRIM: D15/290269 - RE: Climate Change Fund contributions - forward estimates

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Hi Garry

We have prepared documents for the Contributions Order consultation and approval process.

The proposed contribution from Ausgrid for 2015/16 is \$ 148,688,092.58. The overall contributions from the three DNSPs is \$308.600 million.

Regards  
Scott

Scott Dowdell  
Senior Project Officer - Data and Evaluation  
Regional Operations Group  
Office of Environment and Heritage  
NSW Department of Planning and Environment  
PO Box A290, Sydney South, NSW 1232  
T: 02 9995 6326  
W: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

## **Attachment G: TransGrid's Transmission Charges for FY16**

This attachment contains two separate files named:

Attachment G - TransGrid's Transmission Charges for FY16 - Cover Letter.pdf

Attachment G - TransGrid's Transmission Charges for FY16 - Schedule.pdf



## Attachment H: Pricing Information for Ancillary Network Services

### Ancillary Services Prices (\$m nominal)

Services	Type	Price	Units
<b>Design related services</b>			
<b>Design information</b>			
<b>Underground urban residential subdivision (vacant lots)</b>			
- Up to 5 lots	Fee-Based	\$443.87	per service
- 6 to 10 lots	Fee-Based	\$591.83	per service
- 11 - 40 lots	Fee-Based	\$1,035.70	per service
- Over 40 lots	Fee-Based	\$1,331.61	per service
Rural overhead subdivisions and rural extensions	Quoted/ Hourly Rate	\$147.96	per hour
Underground commercial and industrial or rural subdivisions (vacant lots - no development)	Quoted/ Hourly Rate	\$147.96	per hour
Commercial and industrial developments	Quoted/ Hourly Rate	\$147.96	per hour
<b>Asset relocation or street lighting</b>			
- Rate 2	Quoted/ Hourly Rate	\$147.96	per hour
- Rate 3	Quoted/ Hourly Rate	\$172.44	per hour
- Rate 5 - major	Quoted/ Hourly Rate	\$218.56	per hour
URD including Kiosk/HVC/PT (NEW)	Fee-Based	\$554.84	charge per lot
Chambers, Multi Kiosk, CBD Chambers (NEW)	Quoted/ Hourly Rate	\$147.96	per hour
<b>Design certification</b>			
<b>Underground urban residential subdivision (vacant lots)</b>			
- Up to 5 lots	Fee-Based	\$295.91	per service
- 6 to 10 lots	Fee-Based	\$443.87	per service
- 11 - 40 lots	Fee-Based	\$739.78	per service
- Over 40 lots	Fee-Based	\$887.74	per service
<b>Rural overhead subdivisions and rural extensions</b>			
- 1 - 5 poles	Fee-Based	\$295.91	per service
- 6 -10 poles	Fee-Based	\$443.87	per service
- 11 or more poles	Fee-Based	\$739.78	per service
<b>Underground commercial and industrial or rural subdivisions (vacant lots - no development)</b>			
- Up to 10 lots	Fee-Based	\$443.87	per service
- 11- 40 lots	Fee-Based	\$591.83	per service

Services	Type	Price	Units
- Over 40 lots	Fee-Based	\$887.74	per service
Commercial and industrial developments	Quoted/ Hourly Rate	\$172.44	per hour
<b>Asset relocation or street lighting</b>			
- Rate 2	Quoted/ Hourly Rate	\$147.96	per hour
- Rate 3	Quoted/ Hourly Rate	\$172.44	per hour
Kiosk/HVC/PT (NEW)	Fee-Based	\$887.74	plus charge per lot
Certification Suburban/CBD Chambers	Quoted/ Hourly Rate	\$147.96	plus charge per lot
Chambers, Multi Kiosk, CBD Chambers (NEW)	Quoted/ Hourly Rate	\$147.96	per hour
<b>Design rechecking</b>			
Underground urban residential subdivision (vacant lots)	Quoted/ Hourly Rate	\$147.96	per hour
Rural overhead subdivisions and rural extensions	Quoted/ Hourly Rate	\$147.96	per hour
Underground commercial and industrial or rural subdivisions (vacant lots - no development)	Quoted/ Hourly Rate	\$147.96	per hour
<b>Commercial and industrial developments</b>			
- normal	Quoted/ Hourly Rate	\$172.44	per hour
- major connections	Quoted/ Hourly Rate	\$218.56	per hour
<b>Asset relocation or street lighting - normal</b>			
- normal	Quoted/ Hourly Rate	\$172.44	per hour
- major connections	Quoted/ Hourly Rate	\$218.56	per hour
<b>ASP inspection services</b>			
<b>Inspection of service work by Level 1 ASPs</b>			
<b>Underground urban residential subdivision (vacant lots)</b>			
- Grade A: First 10 lots:	Fee-Based	\$73.98	per lot
- Grade B: First 10 lots:	Fee-Based	\$177.55	per lot
- Grade C: First 10 lots:	Fee-Based	\$369.90	per lot
<b>Underground urban residential subdivision (vacant lots)</b>			
- Grade A: Next 40 lots:	Fee-Based	\$44.38	per lot
- Grade B: Next 40 lots:	Fee-Based	\$103.57	per lot
- Grade C: Next 40 lots:	Fee-Based	\$221.94	per lot
<b>Underground urban residential subdivision (vacant lots)</b>			

Services	Type	Price	Units
- Grade A: Remainder:	Fee-Based	\$14.79	per lot
- Grade B: Remainder:	Fee-Based	\$59.18	per lot
- Grade C: Remainder:	Fee-Based	\$103.57	per lot
<b>Rural overhead subdivisions and rural extensions</b>			
- Grade A: 1-5 poles	Fee-Based	\$88.78	per pole
- Grade B: 1-5 poles	Fee-Based	\$177.55	per pole
- Grade C: 1-5 poles	Fee-Based	\$325.50	per pole
<b>Rural overhead subdivisions and rural extensions</b>			
- Grade A: 6-10 poles	Fee-Based	\$73.98	per pole
- Grade B: 6-10 poles	Fee-Based	\$147.96	per pole
- Grade C: 6-10 poles	Fee-Based	\$295.91	per pole
<b>Rural overhead subdivisions and rural extensions</b>			
- Grade A: 11poles	Fee-Based	\$59.18	per pole
- Grade B: 11poles	Fee-Based	\$103.57	per pole
- Grade C: 11poles	Fee-Based	\$221.94	per pole
<b>Underground commercial and industrial or rural subdivisions (vacant lots - no development)</b>			
- Grade A: First 10 lots:	Fee-Based	\$73.98	per lot
- Grade B: First 10 lots:	Fee-Based	\$177.55	per lot
- Grade C: First 10 lots:	Fee-Based	\$369.90	per lot
<b>Underground commercial and industrial or rural subdivisions (vacant lots - no development)</b>			
- Grade A: Next 40 lots:	Fee-Based	\$73.98	per lot
- Grade B: Next 40 lots:	Fee-Based	\$177.55	per lot
- Grade C: Next 40 lots:	Fee-Based	\$369.90	per lot
<b>Underground commercial and industrial or rural subdivisions (vacant lots - no development)</b>			
- Grade A: Remainder:	Fee-Based	\$73.98	per lot
- Grade B: Remainder:	Fee-Based	\$177.55	per lot
- Grade C: Remainder:	Fee-Based	\$369.90	per lot
Plus flat fee travel time (all inspection services)	Fee-Based	\$73.98	per service
HV/LV UG Joint, ABS/Enclosed Switch, UGOH (NEW)	Fee-Based	\$443.87	plus charge per lot
Decommission substation (NEW)	Fee-Based	\$1,183.65	plus charge per lot
Substations (Kiosk/PT) or HV Sw cubicle (NEW)	Fee-Based	\$1,035.70	plus charge per lot
<b>Commercial and industrial developments</b>			
- Rate 2	Quoted/ Hourly Rate	\$147.96	per hour
- Rate 3	Quoted/ Hourly Rate	\$172.44	per hour

Services	Type	Price	Units
- Rate 5 - major	Quoted/ Hourly Rate	\$218.56	per hour
<b>Asset relocation or street lighting</b>			
- Rate 2	Quoted/ Hourly Rate	\$147.96	per hour
- Rate 3	Quoted/ Hourly Rate	\$172.44	per hour
- Rate 5 - major	Quoted/ Hourly Rate	\$218.56	per hour
<b>Inspection of service work (by Level 2 ASPs)</b>			
All Service connections - A Grade	Fee-Based	\$30.47	per service
All Service connections - B Grade	Fee-Based	\$52.66	per service
All Service connections - C Grade	Fee-Based	\$171.03	per service
<b>Re-inspection of L1 &amp; L2</b>			
L1 - network construction	Quoted/ Hourly Rate	\$147.96	per hour
L2 (NOSW)	Quoted/ Hourly Rate	\$172.44	per hour
L1 or L2 major connection	Quoted/ Hourly Rate	\$218.56	per hour
<b>Reinspection of installation work in relation to customer assets</b>			
Installation (CoCEW)	Quoted/ Hourly Rate	\$147.96	per hour
<b>Contestable Substation Commissioning</b>			
Underground urban residential subdivision (vacant lots)	Fee-Based	\$1,864.09	per service
Rural overhead subdivisions and rural extensions	Fee-Based	\$1,098.89	per service
Underground commercial and industrial or rural subdivisions (vacant lots - no development)	Fee-Based	\$2,478.95	per service
Commercial and industrial developments	Quoted/ Hourly Rate	\$147.96	per hour
Asset relocation or street lighting	Quoted/ Hourly Rate	\$147.96	per hour
Complex & Chamber substations (NEW)	Quoted/ Hourly Rate	\$147.96	per hour
<b>Access Permits</b>			
Underground urban residential subdivision (vacant lots)	Fee-Based	\$1,886.08	per service
Rural overhead subdivisions and rural extensions	Fee-Based	\$1,886.08	per service
Underground commercial and industrial or	Fee-Based	\$1,886.08	per service

Services	Type	Price	Units
rural subdivisions (vacant lots - no development)			
Commercial and industrial developments	Fee-Based	\$1,886.08	per service
Asset relocation or street lighting	Fee-Based	\$1,886.08	per service
Complex & Chamber substations (NEW)	Quoted/ Hourly Rate	\$147.96	per hour
Clearance to work	Fee-Based	\$961.72	per service
Access (standby person)	Quoted/ Hourly Rate	\$137.17	per hour
Notices of arrangement	Fee-Based	\$481.16	per notice
<b>Authorisation of ASPs</b>			
Level 1 ASP	Fee-Based	\$560.61	per service
Level 2 ASP	Fee-Based	\$388.18	per service
<b>Administration services relating to work performed by ASPs including processing work</b>			
<b>Underground urban residential subdivision (vacant lots)</b>			
- Up to 5 lots	Fee-Based	\$369.08	per service
- 6 - 10 lots	Fee-Based	\$461.35	per service
- 11 - 40 lots	Fee-Based	\$645.89	per service
- Over 40 lots	Fee-Based	\$738.16	per service
<b>Rural overhead subdivisions and rural extensions</b>			
- Up to 5 poles:	Fee-Based	\$369.08	per service
- 6-10 poles:	Fee-Based	\$461.35	per service
- 11 or more poles	Fee-Based	\$830.43	per service
Underground commercial and industrial or rural subdivisions (vacant lots - no development)	Quoted/ Hourly Rate	\$92.27	per hour
Commercial and industrial developments	Quoted/ Hourly Rate	\$92.27	per hour
Asset relocation or street lighting	Quoted/ Hourly Rate	\$92.27	per hour
Subdivision involving substation/s (NEW)	Fee-Based	\$110.72	per service
Additional services required by ASP/Applicant e.g Guarantee of revenue, clarification meetings, variations to contract, reinspections etc. (NEW)	Quoted/ Hourly Rate	\$92.27	per hour
<b>Supply of conveyancing information</b>			
Desk enquiry	Fee-Based	\$30.71	per service
Field Visit	Fee-Based	\$238.63	per service
Customer interface coordination for contestable works	Quoted/ Hourly Rate	\$207.03	per hour
Preliminary enquiry service	Quoted/ Hourly Rate	\$209.34	per hour

Services	Type	Price	Units
<b>Connection offer service (basic or standard)</b>			
Basic 100A Connections NOT requiring a load slip	Fee-Based	\$7.69	per service
Basic 100A Connections requiring a load slip or Basic Micro EG Connections >5kW or Over 100A Connection Offer (new or existing site)	Fee-Based	\$195.50	per service
Standard Off-Site or On-Site Augmentation Work	Fee-Based	\$195.50	per service
Standard Offer ASP1 Connections	Fee-Based	\$250.03	per service
Standard Embedded Generation >5MVA capacity	Quoted/ Hourly Rate	\$218.56	per hour
<b>Rectification works</b>			
a. Rectification of illegal Connections	Fee-Based	\$776.80	per service
b. Provision of service crew/additional crew	Quoted/ Hourly Rate	\$274.33	per hour
c. Fitting of Tiger tails	Quoted/ Hourly Rate	\$137.17	per hour plus rental of tiger tails
d. High load escorts	Quoted/ Hourly Rate	\$139.87	per hour
Connection / relocation process facilitation	Quoted/ Hourly Rate	\$209.34	per hour
<b>Services to supply and connect temporary supply to one or more customers</b>			
Install & remove HV LL Links	Fee-Based	\$5,345.93	per service incl. materials costs
Break & remake HV bonds	Fee-Based	\$2,670.76	per service incl. materials costs
Break & remake LV bonds	Fee-Based	\$1,928.01	per service incl. materials costs
Connect & disconnect MG to OH mains	Fee-Based	\$2,675.78	per service incl. materials costs
Connect & disconnect MG to LV board in Kiosk	Fee-Based	\$2,093.50	per service incl. materials costs
Carrying out planning studies and analysis relation to distribution (including sub-transmission and dual-function assets) connection applications	Quoted/ Hourly Rate	\$218.56	per hour
Services involved in obtaining deeds of	Quoted/ Hourly Rate	\$218.56	per hour plus legal costs

Services	Type	Price	Units
agreement in relation to property rights associated with contestable connection works			
Investigate, review & implementation of remedial actions associated with ASP's connection works	Quoted/ Hourly Rate	\$218.56	per hour
<b>Metering Services</b>			
Metering Site Establishment	Fee-Based	\$54.29	per service
Special Meter Reading	Fee-Based	\$10.04	per service
Type 5-6 Meter Test	Fee-Based	\$568.07	per service
Franchise current transformer (CT) meter install	Quoted/ Hourly Rate	\$0.00	per hour
Types 5-7 non-standard Meter Data Services	Fee-Based	\$14.33	per service
Emergency maintenance of failed metering equipment not owned by the network	Fee-Based	\$162.43	per service
Off peak conversion	Fee-Based	\$205.54	per service
Disconnection Visit (Site Visit Only)	Fee-Based	\$43.40	per service
Disconnection Completed	Fee-Based	\$143.67	per service
Disconnection Visit (Disconnection Completed- Technical/ Advanced)	Fee-Based	\$241.60	per service
Pillar/ Pole Top Disconnection Completed	Fee-Based	\$383.79	per service
Pillar/Pole Top Site Visit	Fee-Based	\$320.48	per service
Reconnection/ Disconnection Outside Normal Business Hours	Fee-Based	\$98.97	per service
Network Tariff Change Request	Fee-Based	\$0.00	per service
Recovery of Debt Collection Costs- Dishonoured Transactions	Fee-Based	\$25.28	per service
Attendance at customers' premises to perform a statutory right where access is prevented	Fee-Based	\$78.03	per service
Vacant Property Disconnection	Fee-Based	\$140.96	per service
Vacant Property Site Visit	Fee-Based	\$35.98	per service

## Attachment I: Pricing Information for Type 5 and 6 Metering Services

**Table 16.2: Annual metering charges for FY16 by Tariff**

Tariff class	Costs	\$ nominal per annum
Residential inclining block	Non-capital	\$9.75
	Capital	\$20.04
Residential TOU	Non-capital	\$25.20
	Capital	\$22.31
Controlled load	Non-capital	\$0.82
	Capital	\$11.13
Small business inclining block	Non-capital	\$10.06
	Capital	\$30.64
Small business TOU	Non-capital	\$24.97
	Capital	\$21.29
LV 40–160MWh TOU (system)	Non-capital	\$44.44
	Capital	\$27.72
Generator tariff	Non-capital	\$2.59
	Capital	\$11.49

**Table 16.3: Up-front Meter charges for FY16**

Meter description	Meter code	\$ nominal
Single phase single element two wire direct connected accumulation watt-hour meter	B1	\$47.18
Three phase single element four wire direct connected accumulation watt-hour meter	B3	\$122.64
Single phase single element two wire direct connected interval watt-hour meter	E1	\$114.96
Single phase dual element two wire direct connected interval watt-hour meter	E2	\$175.50
Three phase single element four wire direct connected interval watt-hour meter	E3	\$237.28
Three phase single element CT connected interval watt-hour meter	E4	\$572.98



## **Attachment J: Long Run Marginal Cost Model CONFIDENTIAL**

This attachment is a Microsoft Excel spreadsheet named:

Attachment J - Long Run Marginal Cost Model CONFIDENTIAL.xlsx

## **Attachment K: Avoidable and Standalone Cost Model CONFIDENTIAL**

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This attachment is a Microsoft Excel spreadsheet named:

Attachment K - Avoidable and Standalone Cost Model CONFIDENTIAL.xls

## **Attachment L: Pricing Compliance Model for Alternative Control Services**

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This attachment is a Microsoft Excel spreadsheet named:

Attachment L - Pricing Compliance Model for Alternative Control Services.xlsx

## **Attachment M: Pricing Compliance Model for Public Lighting Customer Charges CONFIDENTIAL**

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This attachment is a Microsoft Excel spreadsheet named:

Attachment M - Pricing Compliance Model for Public Lighting Customer Charges  
CONFIDENTIAL.xlsx