Transitional Regulatory Proposal

Distribution services provided by the ActewAGL Distribution electricity network in the Australian Capital Territory

2014-15 transitional regulatory control period

January 2014

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1 Introduction

1.1 About this submission

This *transitional regulatory proposal* (transitional proposal) for the *transitional regulatory control period* (the transitional period), a period of one year commencing on 1 July 2014 and ending on 30 June 2015, is submitted by ActewAGL Distribution in respect of the distribution services provided by the electricity distribution network that it owns, controls and operates in the Australian Capital Territory (ACT). It has been prepared in accordance with the provisions of Division 2 of Part ZW of Chapter 11 (transitional provisions) of the National Electricity Rules (NER or the Rules). [1]

On 29 November 2012, the Australian Energy Market Commission (AEMC) published its final determination on the *Economic Regulation of Network Service Providers* rule changes. This involved the publication of *amending rules* under Schedules 1 and 3 of the *National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*.

The rule changes also required the Australian Energy Regulator (AER) to develop several regulatory guidelines. This process, in combination with the objective set by the AEMC of applying the new rules as soon as possible to as many as possible network service providers, interrupted the established cycle of regulatory determinations. Transitional provisions governing the process for New South Wales and ACT Distribution Network Service Providers (DNSPs), whose five-year regulatory period was to end on 1 July 2014, were inserted in Division 2 of Part ZW in Chapter 11 of the Rules. The transitional provisions set out the requirements for securing a transitional regulatory determination (transitional determination) from the AER for the transitional period to be followed by a full determination (the subsequent determination) covering the four year period following the completion of the transitional period (the subsequent period).

1.2 About ActewAGL Distribution

The ActewAGL joint venture was formed in October 2000 combining ACTEW Corporation's network and retail electricity business with AGL's ACT and Queanbeyan network and retail gas business to become the first multi-utility in Australia operating as a public-private partnership. ActewAGL operates as two partnerships: ActewAGL Distribution and ActewAGL Retail.

Since the conclusion of business dealings between AGL and Alinta in October 2006, ownership of ActewAGL Retail has been shared equally between AGL Energy Limited and ACTEW Corporation

[1] All terms used in this transitional proposal that are defined in Chapter 10 or clause 11.55.1 of the Rules are intended to take that defined meaning unless the context otherwise requires.

Limited. At that time, ownership of ActewAGL Distribution became shared equally between Alinta Limited and ACTEW Corporation Limited. Further changes to the distribution partnership occurred when a consortium including Singapore Power purchased Alinta in 2007.

The ActewAGL Distribution partnership is now equally owned by Jemena Ltd and ACTEW Corporation Ltd via their respective subsidiary companies, Jemena Networks (ACT) Pty Ltd and ACTEW Distribution Ltd. As well as the electricity network in the ACT, ActewAGL Distribution owns and controls the gas distribution networks in the ACT/Queanbeyan/Palerang, and Shoalhaven regions.

ActewAGL Distribution's electricity distribution network comprises 2,402km of overhead lines, 2,650km of underground cables and 14 zone substations. It supplies electricity to around 177,000 electricity customers in the ACT.

ActewAGL Distribution continues to deliver a combination of comparatively low network prices, and a high level of network reliability. According to the AEMC's most recent annual report on national electricity price trends, network charges in the ACT are the lowest in Australia. According to the AEMC's estimates, the 2012/13 regulated network charge (in cents/kWh) in the ACT was around half that of New South Wales, and about 20 per cent lower than in Victoria.[2]

Service performance measures published annually by the AER indicate that the ACT has the most reliable network in the National Electricity Market (NEM), in terms of the average frequency and duration of interruptions.[3] This level of reliability is in line with the jurisdictional minimum standard for customer minutes off supply and reflects a range of factors including a relatively compact network with only two voltage levels and a relatively high proportion of undergrounding. A customer willingness to pay survey undertaken by NERA Economic Consulting and AC Nielsen for ActewAGL in 2003 supports these reliability levels, with all customer groups preferring to maintain the current standards to the alternative of accepting lower standards at a lower price. Further survey work by researchers at the Australian National University in 2012 confirmed that residential customers' willingness to pay has remained relatively constant in real terms since that time.

1.3 Rule requirements for a transitional proposal

The transitional provisions set out special measures[4] applying to an *affected DNSP*, defined to mean a NSW/ACT DNSP and further defined to include by specific nomination the ActewAGL Distribution partners providing distribution services in the ACT.[5] The Rules specify that that these

[2] AEMC 2013, *Electricity price trends, Final Report*, December

[3] AER 2013, *State of the Energy Market 2013*, December, p 80. The SAIDI and SAIFI measures reported by the AER do not distinguish between planned and unplanned outages.

[4] Rules, clause 11.56

[5] Definitions for *affected DNSP* and *NSW/ACT DNSP* in clause 11.55.1 of the Rules

special provisions prevail to the extent of any inconsistency over any other clause in the Rules.[6] Sub-clause 11.56.2 specifies:

> *A transitional regulatory proposal must comply with the requirements of transitional Chapter 6 and this Division 2.*

Transitional Chapter 6[7] is defined in clause 11.55.2 by reference to current Chapter 6[8] of the Rules (as applying immediately after the rule changes came into force) altered through omission, amendment or substitution of certain words and phrases, or the non-application of references to particular subject matter by that clause. The requirements of transitional Chapter 6 in relation to the transitional proposal are summarised in Table 0.1 in Appendix 1 to this transitional proposal, which in turn references where they are addressed in relevant sections of this transitional proposal.

Clause 11.56.2 of the Rules sets out in sub-clause (b) additional information required to accompany the transitional proposal. These requirements are reproduced in Table 0.2 in Appendix 1 to this transitional proposal, which in turn references where they are addressed in relevant sections of this transitional proposal.

The required elements of the transitional determination by the AER (in addition to the constituent decision elements of transitional chapter 6)[9] are set out in clause 11.56.3 of the Rules. These and the elements of clause 6.12.1 of transitional chapter 6 are addressed in relevant sections of this transitional proposal.

1.4 Structure of the transitional proposal

Following this introduction, the remainder of the transitional proposal is set out as follows:

- Chapter 2 addresses matters relevant to the AER's *Stage 1 Framework and approach paper ActewAGL* of March 2013 (Stage 1 F&A paper) including control mechanisms, pricing of dual function assets, and classification of services;

[6] Rules, clause 11.55.3 *Application of rule 11.56*

[7] Unless the context indicates otherwise, all references to transitional Chapter 6 in this transitional proposal are references to transitional Chapter 6 as defined in clause 11.55.2 of the Rules to mean current Chapter 6 as modified in accordance with that clause. Current Chapter 6 is defined in clause 11.55.1 of the Rules to mean Chapter 6 of the Rules as in force immediately after Schedules 1 and 3 of the *National Electricity (Economic Regulation of Network Service Providers) Rule 2012* came into force on 29 November 2012. Version 53 of the Rules contains the Rules as in force in the period 29 November 2012 to 31 December 2012 and, thus, current Chapter 6.

[8] Unless the context indicates otherwise, all references to current Chapter 6 are references to current Chapter 6 as defined in clause 11.55.1 of the Rules to mean Chapter 6 of the Rules as in force immediately after Schedules 1 and 3 of the *National Electricity (Economic Regulation of Network Service Providers) Rule 2012* came into force.

[9] Rules, clause 6.12.1 as modified by clause 11.55.2

- Chapter 3 addresses the revenue requirement for standard control services for the transitional period (including the allocation of revenues to transmission standard control services) and derives indicative prices for these services for the transitional period;
- Chapter 4 addresses matters relevant to the regulation of services provided by ActewAGL Distribution that have been classified by the AER as *alternative control services*—that is, regulated metering services and ancillary network services;
- Chapter 5 addresses calculation of the rate of return comprising the weighted average of the costs of equity and debt applicable to a benchmark utility;
- Chapter 6 sets out the principles and elements of the proposed connection policy that ActewAGL Distribution is required to submit with the transitional proposal;
- Chapter 7 addresses other matters relevant to the transitional proposal—jurisdictional schemes and the identification of confidential information.

Additional information, where referenced, forms attachments to this transitional proposal.

2 Implications of the framework and approach paper

The purpose of the framework and approach phase of a regulatory review is to address a number of issues prior to regulatory proposals being submitted.

The AER published its Stage 1 F&A paper for ActewAGL Distribution on 25 March 2013. The Stage 1 F&A paper applies to both the transitional period and subsequent period, and contains the AER's decisions on control mechanisms and dual function assets and its proposed approach to the classification of services and the formulae to give effect to the control mechanisms.

The *Stage 2 Framework and approach paper* (Stage 2 F&A paper) for ActewAGL Distribution, covering the application of incentive schemes and other matters, is to be published by 31 January 2014, and accordingly ActewAGL Distribution has not had an opportunity to consider or make submissions on how any applicable incentive schemes are to apply to it in this transitional proposal. ActewAGL Distribution observes that, in making a constituent decision on how any applicable incentive schemes are to apply to ActewAGL Distribution in the transitional period,[10] the AER must inform ActewAGL Distribution of any material issues under consideration by it and give ActewAGL Distribution a reasonable opportunity to make submissions on this constituent decision before the transitional determination is made.[11]

The transitional provisions that apply to the framework and approach papers for the ACT and New South Wales DNSPs and the AER's decisions on classification of services, control mechanisms, formulae for control mechanisms, and dual function assets, are set out in the following sections.

2.1 Classification of services

Clause 11.56.3(a)(1) of the transitional provisions requires the AER to specify for the transitional period the same classification of distribution services as applied for the current regulatory control period (current period), except to the extent that the framework and approach paper for the subsequent regulatory control period provides otherwise.

In the Stage 1 F&A paper, the AER sets out its proposed approach to the classification of distribution services provided by ActewAGL Distribution, for both the transitional period and the

[10] Being the constituent decision required by clause 6.12.1(9) of transitional Chapter 6

[11] NEL, section 16(1)(b)

subsequent period.[12] The proposed classifications must be adopted in the transitional determination.[13]

The AER's proposed service classification, shown in Table 2.1, differs from that applied to ActewAGL Distribution in the current period in that ancillary network services, which are currently classified as standard control services, are re-classified as alternative control services. In addition, the AER separates connection services from network services while maintaining the current standard control classification.

In response to the AER's June 2012 *Framework and Approach Preliminary Positions* paper, ActewAGL Distribution raised some issues relating to the classification of services and the application of chapter 5A of the Rules and the AER's *Connection charge guidelines for retail electricity customers, under chapter 5A of the Rules* (the AER connection charge guidelines).

In the Stage 1 F&A paper the AER noted that its classification may be inconsistent with ActewAGL Distribution's *Connection Policy* which, at the time, was still being drafted. The AER said that it may consider such inconsistencies unforeseeable in the circumstances, and accept adjustments to the classification and that proposed adjustments to the classification would be considered in its draft determination.[14] ActewAGL Distribution understands the AER to have been referring to its power to depart from the classification set out in the Stage 1 F&A paper in making its subsequent determination,[15] given that the Rules require that the classification specified in the transitional determination be as set out in that paper.[16] In this transitional proposal ActewAGL Distribution therefore seeks only to add to and confirm the classifications established in the Stage 1 F&A as set out in the following sections.

[12] AER 2013, *Stage 1F&A paper*, March, pp 13-27

[13] Rules, clause 11.56.3(a)(1). Clause 6.12.3(b) of current Chapter 6 does not form part of transitional Chapter 6: Rules, clause 11.55.2(a).

[14] AER 2013, *Stage 1 F&A paper,* March, p 20

[15] Under clause 6.12.3(b) of current Chapter 6

[16] Clause 6.12.3(b) of current Chapter 6 does not form part of transitional Chapter 6: Rules, clause 11.55.2(a).

Table 2.1 AER classification of ActewAGL Distribution services

AER service group	*Description**	*AER proposed classification 2014-19*
Network services	Constructing the network Maintaining the network Operating the network for DNSP purposes Planning the network Designing the network Emergency response Administrative support	Standard control
Metering services (type 5 to 7)†	Commissioning of metering and load control equipment Provision of types 5 and 6 meters Types 5 to 7 metering data services (involving the collection, processing, storage and delivery of metering data and the management of relevant NMI Standing Data in accordance with the Rules) Scheduled meter reading Maintaining and repairing meters and load control equipment Meter tests during business hours (refunded if meter proves to be faulty) Special meter reading or check (refunded if original reading was incorrect) Install interval meter at customer's request Replace meter to facilitate renewable energy installation.	Alternative control
Connection services	Premises connections—additions or changes to the connection assets located on the customer's premises (excludes all metering services); Extensions—new assets, other than shared network assets, required to connect a power line or facility outside the present boundaries of the distribution and transmission network owned or operated by a Network Service Provider; Augmentations—any shared network enlargement/enhancement undertaken by a distributor which is not an extension.	Standard control
Ancillary network services	Re-energise or de-energise a site Temporary connections Remove, reposition or disconnect a service Upgrade service Rescheduled visit Issue of copies of electrical drawings Covering of low voltage mains/tiger matting Specification and design inquiry charges Non-standard data services (types 5 to 7 metering) De-energising wires	Alternative control

* A more detailed breakdown of the service types is required for pricing purposes. This is discussed in chapter 4 (alternative control services) of this transitional proposal. The detailed breakdown of services is also provided in ActewAGL Distribution's *Connection Policy*, provided in Attachment G to this transitional proposal.
† Type 5 meters are manually read interval meters. Type 6 meters are accumulation meters. Type 7 metering services are for special unmetered connections such as those for public lighting.

2.1.1 Proposed additions to Alternative Control Services

During the process of preparing the *Connection Policy* ActewAGL Distribution has identified the need for the following two additions to the alternative control services set out in the AER's classification:

- An additional service *Provision of services above the least cost technically acceptable standard at customer's request* should be classified as an alternative control service. The AER indicated in the Stage 1 F&A paper that it is appropriate to classify services that are

customer specific as alternative control services, and set specific prices "to enable the provider of the service to recover the full cost of the service from customers using that service."[17] Services that are provided at a standard above the least cost technically acceptable standard, at the request of the customer, clearly fit into this category. ActewAGL Distribution notes that the AER has classified above standard services as alternative control services in distribution determinations of other network service providers.[18]

- An additional service, *Network technical studies,* should be classified as an alternative control service.[19] Network technical studies are prepared for specific customers, at the customer's request. ActewAGL Distribution therefore considers that the AER should classify these services as alternative control services, and allow the costs to be recovered from the customer on a fee or quoted basis.

2.1.2 Proposed treatment of capital contributions for connection services

A further issue arising from the AER's classification of services is the treatment of capital contributions associated with connection services that are classified as standard control services. ActewAGL Distribution has discussed this matter with AER staff.[20]

Under the current treatment, capital contributions are netted off total capital expenditure before it is rolled into the regulatory asset base (RAB) to ensure that ActewAGL Distribution earns no regulated return on assets paid for by customers. Capital contributions are, however, rolled into the tax asset base (TAB) to compensate for the taxation costs incurred on capital contributions. The forecast capital contributions for each year in the current period are subtracted from forecast capital expenditure for each year in the standard control post tax revenue model (PTRM). An adjustment is then made at the end of the regulatory period for actual capital contributions in the standard control roll forward model (RFM). No further adjustment for capital contributions revenue is made to the standard control revenue allowance in the annual pricing approval process.

AER staff advised that this treatment is the AER's established approach. ActewAGL Distribution seeks formal confirmation that this approach will be applied to ActewAGL Distribution for the transitional period and subsequent period.

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[17] AER 2013, *Stage 1 F&A paper,* March, p 8

[18] For example Aurora Energy has an alternative control service "provision of connection services above minimum requirements" and Ergon Energy has an alternative control service "all quoted (non-standard) services including above standard network and metering services".

[19] A network technical study is usually required for a major new connection or a more complex project. The study identifies the preferred option for system augmentation and connection, and sets out the design costs and the estimated construction costs for the work to be undertaken. This is usually an iterative process where the customer considers various load connection options and scenarios, before selection of the preferred connection.

[20] Teleconference 9 October 2013 and prior and subsequent emails

2.2 Control mechanisms

Clauses 11.56.3(a)(5) and (6) of the transitional provisions require the AER to specify for the transitional period the same control mechanisms for standard control services and alternative control services as applied for the current period, except to the extent that the framework and approach paper for the subsequent regulatory control period provides otherwise.

In the Stage 1 F&A paper, the AER specifies the form of the control mechanisms for direct control services provided by ActewAGL Distribution as follows:

- Standard control services—average revenue cap; and
- Alternative control services—caps on the prices of individual services.

The AER also sets out its proposed formulae to give effect to the control mechanisms.[21]

The AER's determination on the control mechanisms is final and binding. The AER indicated in the Stage 1 F&A paper that it may change its position on the formulae if unforeseen circumstances arise.[22] ActewAGL Distribution understands the AER to have been referring to its power to depart from the formulae set out in the Stage 1 F&A paper in making the subsequent determination.[23]

2.3 Dual function assets

For the purposes of the transitional determination, the Rules deem as a dual function asset:[24]

> *any part of a network owned, operated or controlled by a Distribution Network Service Provider which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage transmission network ...*

The Rules[25] require that a DNSP advise the AER of the dual function assets in its distribution network and their value. The AER must then review this information and determine on the basis of the materiality of the dual function assets in the DNSP's RAB whether prices of the services provided by them should be set under the relevant provisions of Chapter 6A, Part J of the Rules. In the Stage 1 F&A paper, the AER determined that the dual function assets identified within ActewAGL Distribution's distribution network were to be treated in this way in the subsequent period, noting that it was precluded from doing so in the transitional period since clause

[21] AER 2013, *Stage 1 Framework and approach paper: ActewAGL, Transitional regulatory control period 1 July 2014 to 30 June 2015, Subsequent regulatory control period 1 July 2015 to 30 June 2019*, March, p 38 and p 42

[22] AER 2013, Stage 1 F&A paper, p 28

[23] Under clause 6.12.3(c1) of current Chapter 6, which provision does not form part of transitional Chapter 6: Rules, clause 11.55.2(a).

[24] Rules clause 6.24.2(a) of transitional Chapter 6

[25] Rules, clause 6.25 of transitional Chapter 6

11.56.3(g) in the transitional provisions operates to ensure that "[t]he current dual function asset pricing approach continues over the transitional regulatory control period."[26]

On 8 January 2014, ActewAGL Distribution informed the AER that it now believed that the AER must make a determination on dual function assets to apply in the transitional period, and do so in its Stage 2 F&A paper. Further, given the AER's decision in the Stage 1 F&A paper that prices ActewAGL Distribution's dual function assets would be determined under Chapter 6A, Part J in the subsequent period, there was no apparent reason to determine otherwise in the transitional period.

Given this reasoning, and the expected release of the AER's Stage 2 F&A paper on or near the date of the submission of this transitional proposal, ActewAGL Distribution has modelled the application of transmission pricing under Chapter 6A of the Rules from 1 July 2014, the commencement of the transitional period. Clause 6.26(c) of transitional Chapter 6 requires ActewAGL Distribution to submit, as part of its regulatory proposal for the transitional regulatory control period, a proposed pricing methodology in respect of its transmission standard control service revenue. ActewAGL Distribution has included such a pricing methodology at Attachment D to this transitional regulatory proposal.

[26] AER 2013, *Stage 1 F&A paper*, March, p 43

3 Standard control services

This chapter of the transitional proposal addresses the indicative annual revenue requirement for the transitional period for standard control services and the derivation of indicative prices for these services for the transitional period.

The transitional provisions require that:[27]

> *A transitional regulatory proposal must include ... an amount that the affected DNSP proposes will be the annual revenue requirement for the transitional regulatory control period, it being acknowledged that such amount will not be calculated in accordance with the provisions of the Rules that otherwise would apply to the calculation of the annual revenue requirement*

ActewAGL Distribution's revenue requirement for the transitional period is calculated according to the Post Tax Revenue Models (PTRMs) at Attachment A to this transitional proposal based on the estimates derived as per the following sections of the submission.

3.1 Division between transmission and distribution standard control revenues

Where the AER determines that services provided by a DNSP's dual function assets are to be subject to transmission pricing, the AER must for the purposes of the transitional determination, divide the revenue calculated under Part C of Chapter 6 into:[28]

> *(1) a portion relevant to the Distribution Network Service Provider's transmission standard control services provided by its dual function assets. This portion is defined as its transmission standard control service revenue; and*
>
> *(2) a portion relevant to the other standard control services provided by the Distribution Network Service Provider. This portion is defined as its distribution standard control service revenue*
>
> *based on the Distribution Network Service Provider's approved Cost Allocation Method.*

As discussed in chapter 2 of this transitional proposal, the AER determined in the Stage 1 F&A that services provided by ActewAGL Distribution's dual function assets would be subject to transmission pricing. While the AER stated that its decision applies only in respect of the subsequent period, for the reasons explained in Chapter 2, ActewAGL Distribution considers that the transitional provisions of the Rules[29] operate to require the AER to make a determination on the applicable pricing regime for ActewAGL Distribution's dual function assets for the transitional

[27] Rules, clause 6.8.2(b)(1) of transitional Chapter 6 as established by clause 11.55.2(b)

[28] Rules, clause 6.26(b)

[29] In particular, clause 6.25(b) of transitional Chapter 6

period and anticipates that the AER will determine that transmission pricing apply to ActewAGL Distribution's dual function assets in the transitional period.

Accordingly, the current chapter derives the portions of revenue relevant to ActewAGL Distribution's transmission and distribution standard control services by calculating the revenue requirements for each based on a discrete RAB and cost building blocks. In line with a recommendation of AER staff,[30] ActewAGL Distribution has estimated the opening RAB value for the relevant dual function assets by separating them from other assets from the beginning of the current period (1 July 2009).

3.1.1 Derivation of 2009 Regulatory Asset Bases for transmission and distribution

At 30 June 2009, immediately before the commencement of the current period, ActewAGL Distribution's RAB comprised a single asset class. In order to establish an allocation of assets created up to this date between those providing distribution services and those providing transmission services, ActewAGL Distribution used an extract of its asset register at 30 June 2009 to directly allocate this single asset class to the two services. Assets not directly attributable to either service were allocated to each using the respective proportions of each class directly allocated.

The calculated RAB value for transmission as at 1 July 2009 was then used as an input to the AER's roll forward model.

3.1.2 Allocation of expenditure to transmission and distribution standard control services

ActewAGL Distribution has allocated actual and forecast capital and operating expenditure for the period 2009-19 (the current, transitional and subsequent periods) to distribution and transmission standard control services as set out below:

1. Directly allocate costs to transmission and distribution services where possible; or:
2. For costs not directly attributable to either transmission or distribution, a proportional allocation is used to split the total between transmission and distribution:
    a. For operating expenditure: directly allocated maintenance expenditure is used as the allocation factor;
    b. For capital expenditure: the share of directly allocated assets in the RAB is used as the allocation factor.[31]

This allocation is consistent with ActewAGL Distribution's cost allocation methodology approved by the AER in 2013.[32]

[30] Teleconference with AER officers on 30 October 2013

[31] As transmission assets have been substantially augmented in the current period, with the addition of the second point of supply to the ACT, the indirect allocation of expenditure to transmission services has increased from 12.60 per cent in the current period to 18.02 per cent in the 2014-19 period.

3.2 Opening regulatory asset base

An affected DNSP must submit to the AER with its transitional proposal:

> *an indicative estimate of the value of the regulatory asset base for the relevant distribution system at the beginning of the transitional regulatory control period.*[33]

The total indicative opening RAB for the transitional regulatory control period is calculated as per the Roll Forward Model (RFM) at Attachment A to this transitional proposal. Consistent with the current determination, ActewAGL Distribution has used as a starting point the 2008-09 opening value of $574.4 million rolled forward using the actual capital expenditure outcome in 2008-09 (not available at the time of the current determination) and adjusted for the 2004 capital expenditure outcomes. To calculate depreciation ActewAGL Distribution has used actual capital expenditure in accordance with the current determination, which provides as follows:

> *In accordance with clause 6.12.1(18) of the transitional chapter 6 rules* [set out in Appendix 1 to the Rules and applying in the current period pursuant to Division 2, Part M of Chapter 11] *the AER will use actual depreciation for establishing the regulatory asset base for the commencement of the 2014–19 regulatory control period.*[34]

Having rolled forward the RAB using actual capital expenditure and a forecast for 2013-14, ActewAGL Distribution derives a closing RAB on 30 June 2014 for distribution standard control services of $701 million and for transmission standard control services of $154 million. These values include adjustment for underspend of capital expenditure in 2008-09 compared to that assumed in the current determination.

ActewAGL Distribution has used the resulting RAB value as the opening RAB for the transitional period.

Table 3.1 and Table 3.2 summarise the roll forward of the distribution standard control service RAB in the current, transitional and subsequent periods. Table 3.3 and Table 3.4 summarise the roll forward of the transmission standard control service RAB in the current, transitional and subsequent periods.

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[32] It also appears consistent with the cost allocation method between distribution and transmission services that was approved by the AER in its 2009 review of services provided by EnergyAustralia.

[33] Rules, clause 11.56.2(b)(1)

[34] AER 2009, *AER Final determination - ActewAGL (ACT) determination 2009-10 to 2013-14*, April, p 25

Table 3.1 Roll Forward of the distribution RAB, 2009-2014

$ million (nominal)	*2009/10*	*2010/11*	*2011/12*	*2012/13*	*2013/14*
Opening RAB	523.3	559.7	603.8	641.1	662.3
***plus* net capital expenditure**	*53.5*	*57.5*	*49.2*	*45.0*	*70.2*
***less* regulatory depreciation**	*-17.1*	*-13.4*	*-11.8*	*-23.8*	*-22.3*
Closing RAB	*559.7*	*603.8*	*641.1*	*662.3*	*710.3*
Adjustment to opening value					*-9.6*
Opening RAB 1 July 2014					*700.7*

Table 3.2 Roll Forward of the distribution RAB, 2014-2019

$ million (nominal)	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*
Opening RAB	*700.7*	*745.5*	*777.6*	*811.9*	*844.2*
plus net capital expenditure	*72.5*	*63.3*	*65.6*	*65.4*	*69.5*
less regulatory depreciation	*-27.6*	*-31.2*	*-31.4*	*-33.1*	*-33.1*
Closing RAB	*745.5*	*777.6*	*811.9*	*844.2*	*880.6*

Table 3.3 Roll Forward of the transmission RAB, 2009-2014

$ million (nominal)	*2009/10*	*2010/11*	*2011/12*	*2012/13*	*2013/14*
Opening RAB	*75.4*	*86.0*	*99.2*	*117.4*	*136.3*
***plus* net capital expenditure**	*13.1*	*15.1*	*19.9*	*22.7*	*20.5*
***less* depreciation**	*-2.5*	*-1.9*	*-1.7*	*-3.7*	*-3.4*
Closing RAB	*86.0*	*99.2*	*117.4*	*136.3*	*153.4*
Adjustment to opening value					*0.6*
Opening RAB 1 July 2014					*154.0*

Table 3.4 Roll Forward of the transmission RAB, 2014-2019

$ million (nominal)	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*
Opening RAB	*154.0*	*159.5*	*169.5*	*197.3*	*214.6*
plus net capital expenditure	*9.9*	*15.0*	*33.1*	*23.0*	*12.7*
less depreciation	*-4.3*	*-5.1*	*-5.3*	*-5.7*	*-5.9*
Closing RAB	*159.5*	*169.5*	*197.3*	*214.6*	*221.3*

3.3 Indicative range of the rate of return

ActewAGL Distribution has estimated an indicative range of the nominal vanilla weighted average cost of capital (WACC) of 8.79 to 9.49 per cent and a point estimate of 8.88 per cent, using a CPI forecast of 2.45 per cent. The basis for these estimates is discussed in Chapter 5 of this transitional proposal.

3.4 Indicative estimate of forecast expenditure

Under the transitional provisions, an affected DNSP must submit to the AER with its transitional proposal:

> *a summary of the affected DNSP's plan for expenditure for the transitional regulatory control period and the subsequent four regulatory years, together with an explanation of how this proposed expenditure is consistent with the proposed annual revenue requirement that is set out in the transitional regulatory proposal.*[35]

A summary of ActewAGL Distribution's expenditure plan for the transitional period and subsequent period is included at Attachment B to this transitional proposal.

An affected DNSP must also submit to the AER with its transitional proposal:

> *an indicative estimate of the forecast operating expenditure and capital expenditure for the transitional regulatory control period.*[36]

Indicative estimates of capital and operating expenditure are provided below and have been derived in accordance with ActewAGL Distribution's expenditure plan.

3.4.1 Indicative estimate of capital expenditure

ActewAGL Distribution's indicative estimate for capital expenditure in 2014/15, net of capital contributions, is $76.5 million. Estimated average annual forecast capital expenditure of $77.3 million for the transitional period and subsequent period (collectively the 2014-19 regulatory period) will be slightly above actual average annual expenditure of $73.6 million for 2009-14, totalling approximately $386 million for the 2014-19 regulatory period.

ActewAGL Distribution's capital expenditure plan for the 2014-19 regulatory period continues key capital expenditure reform programs that were initiated during the current period, and will enable the ongoing reliability of the network whilst minimising the total life cycle cost of providing network services.

[35] Rules, clause 11.56.2(b)(6)

[36] Rules, clause 11.56.2(b)(3)

Expenditure on asset renewal and replacement expenditure is expected to increase in and from the transitional regulatory period as ActewAGL Distribution extends its asset replacement focus to include underground cables, which in many cases have reached the end of their useful life, or where asset replacement has become a viable alternative to repairing cables on a piecemeal basis. Suburban pole replacement will continue to be a significant driver of capital expenditure outcomes in the 2014-19 regulatory period as ActewAGL Distribution continues the pole replacement program that was approved by the AER in 2009.

Key augmentation projects to be undertaken during the period include the construction of a new zone substation to meet demand from new urban developments in Molonglo and North Weston, an upgrade to the Belconnen Zone Substation to maintain ongoing reliability in the Belconnen region, and Stage 2 of the Southern Supply to ACT project initiated by an ACT Government regulation in 2006.[37]

The capital program also includes the completion and extension of various operational technology (OT) and information technology (IT) projects that were commenced in the current regulatory period, predominately to refresh or replace critical technologies and systems that were at capacity or end of useful life, and no longer able to support core business capabilities or meet future business requirements. Expenditure on these projects will ensure that ActewAGL Distribution can maintain current service standards, reduce risk and meet emerging consumer level data and regulatory reporting requirements.

ActewAGL Distribution's indicative estimates for capital expenditure during the 2014-19 regulatory period are provided in Table 3.5 below. The allocation of capital expenditure to transmission standard control services has been estimated using the allocation method described in Section 3.1 above and netted from total capital expenditure to yield capital expenditure for distribution standard control services.

A summary of ActewAGL Distribution's actual capital expenditure during the current period and forecast capital expenditure for the 2014-19 regulatory period is provided in the expenditure plan summary, at Attachment B to this submission.

[37] Electricity Transmission Regulation 2006

Table 3.5 Indicative estimate of standard control capital expenditure, 2014/15 to 2018/19

Year ending 30 June *$ million (2013/14)*	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*	*Total*
Asset renewal/replacement	26.8	28.5	28.4	28.0	27.2	139.0
Customer initiated	23.7	24.0	21.6	23.1	26.8	119.2
Augmentation	9.7	16.8	35.7	26.9	17.0	106.1
Reliability and Quality Improvement	1.7	1.9	3.2	2.0	0.2	9.0
Network IT Systems	8.9	1.6	1.0	0.7	1.5	13.5
***Less* Capital Contributions**	(8.4)	(8.5)	(7.7)	(7.9)	(9.4)	(42.0)
Non-system assets	10.9	7.0	5.7	3.1	5.7	32.3
Corporate Services Business Support	3.3	1.1	1.2	2.0	1.7	9.3
Total Capital Expenditure	**76.5**	**72.4**	**89.1**	**77.9**	**70.6**	**386.4**
Allocated to transmission	***9.1***	***13.9***	***29.9***	***20.2***	***10.9***	***84.0***
Allocated to distribution	***67.4***	***58.5***	***59.2***	***57.6***	***59.7***	***302.4***

Note: the table above excludes equity raising costs.

3.4.2 Indicative estimate of operating expenditure

ActewAGL Distribution's indicative estimate for operating expenditure in 2014/15 is $75.8 million. Total expenditure for the 2014-19 regulatory period is estimated at the time of this transitional proposal to be $364.4 million.

ActewAGL Distribution's indicative estimate for core network operating expenditure (comprising maintenance, operating and other costs) in 2014/15 is forecast to be below actual core network operating expenditure in the nominated base year (2012/13) of $76.3 million. The 2012/13 base forecast includes a number of unanticipated step changes in operating costs that were incurred during the current regulatory period, and were not included in the AER's regulatory allowance for operating expenditure in the 2009-14 regulatory period.

Compliance with legislated standards and regulatory reporting requirements is a substantial driver of the costs incurred by ActewAGL Distribution in operating and maintaining its electricity network. A number of regulatory obligations that were introduced during the current period are included in the base year expenditure. Additional regulatory obligations that are likely to be introduced during the 2014-19 regulatory period have been built into the operating expenditure forecasts.

Changes to work health and safety legislation in 2011 have had a significant impact on ActewAGL Distribution's operating costs in the current period and will continue to impact costs in the 2014-19 regulatory period. To ensure compliance with important safety requirements, ActewAGL Distribution established an Environment, Health, Safety and Quality division in 2012 and

commenced rewriting its entire suite of safety policies and procedures. This process has been highly resource intensive and will continue into the 2014-19 regulatory period.

There has also been a significant increase in the level of regulatory compliance and reporting during the current regulatory period. Notably, the National Energy Customer Framework (NECF) commenced in the ACT on 1 July 2012, introducing a new set of national laws, rules and regulations governing the sale and distribution of energy to consumers. This framework introduced a number of ongoing reporting and audit requirements, and a commitment to oversee process improvement.[38] The National Planning and Expansion Framework (NPEF) commenced on 1 January 2013. This was initiated by the Ministerial Council of Energy (MCE) in 2011, and includes new demand side obligations on DNSPs within the National Electricity Rules (NER). Obligations include requirements for DNSPs to undertake annual planning reviews, publish annual planning reports, undertake demand side engagement, undertake joint planning with TNSPs, and comply with a new regulatory investment test for distribution.

New obligations such as these have significantly increased monitoring, reporting, compliance and process improvement activities undertaken by ActewAGL Distribution since the time of the last regulatory determination.

Table 3.6 Indicative estimate of standard control operating and maintenance expenditure, 2014/15 to 2018/19

Year ending 30 June *$ million ($2013/14)*	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*	*Total*
Network maintenance costs	23.0	22.3	22.5	22.0	23.1	112.8
Network operating costs	27.7	27.6	26.8	28.3	28.1	138.6
Other expenditures	22.7	22.5	19.2	17.6	19.6	101.7
Total core network operating expenditure	**73.5**	**72.4**	**68.5**	**67.9**	**70.7**	**353.0**
Self insurance†	0.9	0.9	0.9	0.9	0.9	4.6
Debt raising cost	1.3	1.3	1.3	1.4	1.4	6.6
Total*	**75.8**	**74.7**	**70.7**	**70.2**	**73.0**	**364.4**
Allocated to transmission	***12.5***	***12.5***	***11.9***	***11.9***	***12.3***	***61.1***
Allocated to distribution	***63.3***	***62.2***	***58.9***	***58.3***	***60.7***	***303.3***

*Excludes carry over amounts.
†Self insurance allowance approved in 2009 for counterparty credit risk has been removed from this estimate.

[38] In January 2013, the AER approved a cost pass through for costs associated with NECF implementation in 2012.

A summary of ActewAGL Distribution's actual operating expenditure during the current period and forecast operating expenditure for the 2014-19 regulatory period is provided in the expenditure plan summary at Attachment B to this transitional proposal.

3.5 Indicative income tax and depreciation

Under the Transitional provisions, an affected DNSP must submit to the AER with its transitional proposal:

> *an indicative estimate of the cost of corporate tax and depreciation for the transitional regulatory control period.*[39]

3.5.1 Indicative corporate tax

ActewAGL Distribution has used the AER's PTRM, included in Attachment A, to calculate an indicative estimate of the corporate income tax allowance required for 2014/15 as set out in Table 3.7.

3.5.2 Indicative depreciation

ActewAGL Distribution has used the AER's PTRM, included in Attachment A, to estimate depreciation for 2014/15 as set out in Table 3.7. Depreciation is calculated using the same standard lives as determined by the AER in its current determination. To determine the remaining lives of the assets at 1 July 2014, ActewAGL Distribution has adopted an approach that uses real depreciation.[40] ActewAGL Distribution has used the real depreciation amounts calculated by the RFM and divided these by the closing RAB value for respective asset categories with an adjustment made for the real capital expenditure undertaken in 2013/14. This approach ensures that the depreciation allowance is not affected when existing and new assets are combined.

The breakdown between distribution and transmission standard control services is provided in the respective PTRMs at Attachment A to this transitional proposal.

Table 3.7 Indicative estimate of total regulatory depreciation and tax liability, 2014-19

Year ending 30 June $ million (nominal)	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*
Regulatory depreciation	32.0	36.3	36.6	38.9	39.0
Benchmark tax liability	11.4	12.1	11.8	13.7	14.4

[39] Rules clause 11.56.2(b)(4)

[40] In 2009, the AER accepted the use of real depreciation for calculating the remaining lives of assets in ActewAGL Distribution's gas network access arrangement submission.

3.6 Other inputs to the indicative revenue requirement for standard control services

Under the transitional provisions, an affected DNSP must submit to the AER with its transitional proposal:

> *Such other information or inputs as the affected DNSP considers to be relevant to the approval by the AER, under clause 11.56.3, of its* annual revenue requirement *for the transitional regulatory control period.*[41]

Two such matters are discussed in the following sections:

- rewards and penalties under the AER's Efficiency Benefit Sharing Scheme (EBSS) applying to ActewAGL Distribution in the current period; and
- debt and equity raising costs.

3.6.1 Rewards and penalties under the Efficiency Benefit Sharing Scheme

In its current determination, the AER introduced an EBSS to be applied on ActewAGL Distribution's operating expenditure. As part of the decision, the AER identified several operating expenditure cost categories to be excluded from the EBSS, in addition to the exclusion of costs associated with defined and nominated pass through events.

Excluding the cost items identified by the AER in 2009 and pass through events, ActewAGL Distribution has calculated the operating expenditure subject to the EBSS and carryover effects as shown in Table 3.8.

Table 3.8 Operating expenditure subject to the EBSS and carryover effects

$ million (2008/09)	*2009/10*	*2010/11*	*2011/12*	*2012/13*	*2013/14*
Forecast opex for EBSS purposes	**47.6**	**48.2**	**49.2**	**50.9**	**50.5**
Total actual operating expenditure	**59.7**	**69.9**	**79.0**	**86.6**	**87.7**
Excluded costs	**8.4**	**10.7**	**19.0**	**22.7**	**23.0**
Operating expenditure subject to the EBSS	**51.3**	**59.2**	**60.0**	**63.9**	**64.7**
Incremental gain/loss	-3.7	-7.3	0.2	-2.2	0.0
$ million	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*
Carryover effect, (2008/09 dollars)	**-13.0**	**-9.3**	**-2.0**	**-2.2**	**0.0**
Carryover effect, (2013/14 dollars)	**-14.7**	**-10.5**	**-2.2**	**-2.4**	**0.0**
Allocated to distribution, (2013/14 dollars)	**-12.8**	**-9.2**	**-2.0**	**-2.1**	**0.0**
Allocated to transmission, (2013/14 dollars)	**-1.8**	**-1.3**	**-0.3**	**-0.3**	**0.0**

[41] Rules, clause 11.56.2(b)(9)

3.6.2 Debt and equity raising costs

ActewAGL Distribution has reviewed the AER's methodology for calculating debt raising costs. The method is based on the number of multiples of the benchmark median bond issue ($250 million) that comprise the benchmark debt share (60 per cent) of the RAB in each year. The number of multiples is then matched with the corresponding debt raising cost benchmark. When undertaking this exercise, ActewAGL Distribution has combined the transmission and distribution RABs to yield the benchmark debt share of the RAB.

ActewAGL Distribution's benchmark debt share of the combined RAB at the commencement of the 2014-19 regulatory period on 1 July 2014 is estimated at $513 million. The AER's method results in an allowance for debt raising transaction costs of approximately 10.0 basis points per annum for ActewAGL Distribution.

However, there are costs to issuing debt other than the directly related transaction costs. In particular, ActewAGL Distribution considers that the allowed debt raising cost should also include an allowance for costs associated with:

1. Standard & Poor's liquidity requirement; and
2. Standard & Poor's requirement to finance bonds three months ahead of maturity.

ActewAGL Distribution estimates these costs to be in the range of 10 to 15 basis points/annum and has included in this transitional proposal an allowance of 15 basis points/annum for these additional costs. ActewAGL Distribution will provide further details and justification in relation to these costs in its regulatory proposal for the subsequent regulatory period in May 2014.

In total, ActewAGL Distribution has included a debt raising cost allowance of 25 basis points in its transitional proposal. This results in a debt raising cost for distribution standard control services as shown in Table 3.9.

Table 3.9 Debt raising costs, 2014-19

Year ending 30 June *$ million (2013/14)*	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*	*Total*
Debt raising costs – transmission	0.2	0.2	0.2	0.3	0.3	1.2
Debt raising costs – distribution	1.0	1.1	1.1	1.1	1.1	5.4

In relation to equity raising costs, ActewAGL Distribution has applied the AER's equity raising cost model and concluded that, to complete the upcoming capital expenditure program, equity raising costs of $1.3 million will be necessary for ActewAGL Distribution's distribution services and $0.3 million for transmission services. ActewAGL Distribution has added this as capital expenditure consistent with the current determination.

3.7 Indicative range of revenue requirements for the transitional and subsequent periods

Under the transitional provisions, an affected DNSP must submit to the AER with its transitional proposal:

> *an indicative range of the affected DNSP's revenue requirements, for the provision of standard control services, for the transitional regulatory control period and for each of the subsequent four regulatory years which is based on the information and inputs referred to in subparagraphs (1) to (4)* [the indicative estimate of the value of the RAB, the indicative range for the rate of return, the indicative estimates of forecast operating expenditure and capital expenditure, and indicative the indicative estimates of corporate income tax and depreciation, respectively] *and such other information or inputs as the affected DNSP considers to be relevant and as it includes in the information that accompanies the transitional regulatory proposal.*[42]

Table 3.10 and Table 3.11 provide summaries of ActewAGL Distribution's revenue requirement for the transitional and subsequent periods for distribution and transmission standard control services, respectively.

Under clause 11.56.3(b) of the Rules:

> *The AER must only approve the amount that is proposed by an affected DNSP to be its annual revenue requirement for the transitional regulatory control period, as set out by the affected DNSP in its transitional regulatory proposal, if the AER is satisfied that the amount is such that the recovery of it by the affected DNSP is reasonably likely to minimise variations in prices between the affected DNSP's current regulatory control period, transitional regulatory control period and subsequent regulatory control period and between the regulatory years of the subsequent regulatory control period.*

Due to the substantial changes in ActewAGL Distribution's revenue building block arising from the removal of costs of jurisdictional schemes and the application of transmission pricing to dual function assets, ActewAGL Distribution has calculated an adjustment (P_0) in the first year for distribution services. This aims to offset the removal of the costs from the jurisdictional schemes as they will be added to the final tariffs to be submitted to the AER as part of the annual pricing proposal for 2014/15 due in May 2014. The objective is to minimise variation in prices between the current, transitional and subsequent periods. For transmission, ActewAGL Distribution has applied the same x-factor across all five years as this is presumed to minimise variation in prices.

The range of the smoothed revenue requirement has been calculated using the low and high estimates of the nominal vanilla WACC in section 5.3 of this transitional proposal.

[42] Rules, clause 11.56.2(b)(5)

Table 3.10 Indicative range of revenue requirements for distribution standard control services for transitional and subsequent periods

Year ending 30 June $ million (nominal)	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*
Return on capital	62.2	66.2	69.0	72.1	74.9
Regulatory depreciation	27.6	31.2	31.4	33.1	33.1
Operating expenditure	64.8	65.3	63.3	64.2	68.5
Carry-over amounts	-13.1	-9.7	-2.1	-2.4	0.0
Benchmark tax liability	9.9	10.5	10.2	11.7	12.3
Revenue building block	**151.5**	**163.5**	**171.8**	**178.7**	**188.9**
Smoothed revenue requirement, point estimate	155.9	161.7	170.1	178.8	186.8
Smoothed revenue requirement, high	161.6	167.6	176.3	185.3	193.6
Smoothed revenue requirement, low	154.9	160.7	169.0	177.6	185.6
X-factor, point estimate (%)	13.6	-1.5	-1.5	-1.5	-1.5

Table 3.11 Indicative range of revenue requirements for transmission standard control services for transitional and subsequent periods

Year ending 30 June $ million (nominal)	*2014/15*	*2015/16*	*2016/17*	*2017/18*	*2018/19*
Return on capital	13.7	14.2	15.0	17.5	19.0
Regulatory depreciation	4.3	5.1	5.3	5.7	5.9
Operating expenditure	12.8	13.1	12.8	13.2	13.9
Carry-over amounts	-1.9	-1.4	-0.3	-0.3	0.0
Benchmark tax liability	1.4	1.5	1.6	2.0	2.1
Revenue building block	**30.3**	**32.5**	**34.4**	**38.0**	**41.0**
Smoothed revenue requirement, point estimate	30.2	32.5	35.0	37.8	40.7
Smoothed revenue requirement, high	30.6	33.4	36.5	39.8	43.5
Smoothed revenue requirement, low	30.1	32.3	34.8	37.4	40.2
X-factor, point estimate (%)	-5.2	-5.2	-5.2	-5.2	-5.2

In addition, the DNSP must provide to the AER information on:

> *the revenue that the affected DNSP estimates it will earn from the provision of standard control services during the last regulatory year of the current regulatory control period*[43]

[43] Rules, clause 11.56.2(b)(8)

ActewAGL Distribution forecasts that it will earn $184.4 million (including $1.6 million from ancillary charges) from the provision of standard control services in 2013/14.

3.8 Indicative estimate of demand for standard control services

Under the transitional provisions, an affected DNSP must submit to the AER with its transitional proposal:

> *where the regulatory control mechanism that is to apply for a direct control service under clause 11.56.3(a)(5) [standard control] or (6) [alternative control] is or includes a price cap or a price control, an indicative estimate of the demand (including customer numbers, energy demand, and maximum demand) for that type of direct control service for the transitional regulatory control period and each of the subsequent four regulatory years.*[44]

While the requirement to provide indicative demand forecasts relates to price cap control mechanisms, ActewAGL Distribution notes that energy consumption forecasts are necessary under the average revenue cap approach and therefore includes an indicative energy consumption estimate for the transitional period in this transitional proposal.

Consultant Sinclair Knight Merz (SKM) has prepared energy consumption forecasts for ActewAGL Distribution. In preparing the forecasts, SKM assessed several top-down regression models before recommending a specification on the grounds of statistical fit and an economically robust interpretation.

For the purposes of this transitional proposal an indicative consumption estimate of 2,736.7 GWh is provided. The consumption forecasts will be updated using the latest available input data and submitted to the AER in May 2014 as part of the subsequent proposal and further updated for the revised proposal in January 2015.

Recent and continuing decline in energy consumption is found by SKM to be driven primarily by increasing energy efficiency measures adopted by consumers, lower economic growth and growing output from embedded generation, including photovoltaic (PV) systems. The AER and the Australian Energy Market Operator (AEMO) have also identified these factors as key drivers of falling electricity consumption at the national level.[45]

Although ActewAGL has utilised expert external advice to develop the best possible indicative estimate of energy sales, considerable inherent uncertainty remains in the forecast. Forecasting uncertainty is now significantly greater than it has been in the past.[46]

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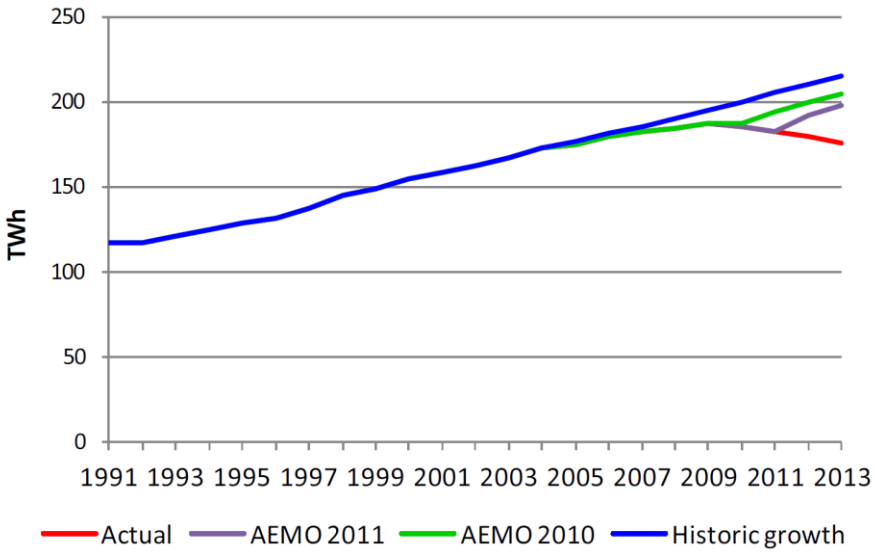
[44] Rules, clause11.56.2(b)(7)

[45] AEMO 2013, *National Electricity Forecast Report, Executive Summary*, June, p i, and AER 2013, *State of the Energy Market 2013*, December, p 7.

[46] See for example the analysis and conclusions in AEMC 2013, *Consideration of differences in actual compared to forecast demand in network regulation, Advice to SCER*, April, pp. 51-53

Decreases in annual energy sales in the NEM had not been observed prior to 2010. Energy sales forecasts now need to contemplate not only the potential magnitude of growth in sales, but also the possibility that sales will continue to decline. The difficulty in forecasting just a single year ahead under current circumstances has been highlighted by the frequent and dramatic revisions that AEMO has needed to make to its forecasts since 2010 (see Figure 3.1).[47] Forecasting energy sales over a period of five years is considerably more uncertain.

Figure 3.1 Actual annual energy sent out by generators in the NEM since 1991, and three projections



Source: Saddler, H. 2013, *Power down – why is electricity consumption decreasing*, The Australia Institute Paper No 14, December, p 16

Clause 11.56.2(b)(7) also refers to the provision of indicative estimates of customer numbers and maximum demand. While these are relevant where price caps apply, they are not necessary for the application of an average revenue cap.

The system maximum demand model uses population and weather to explain changes in maximum demand. While derived separately, the system maximum demand forecasts and SKM's methodology are based on common input assumptions.

[47] In November 2013 AEMO made a further downward revision to its June 2013 forecast. This is not captured in Figure 3.2.

3.9 Indicative prices for distribution standard control services in the transitional period

Clause 6.8.2(b)(2) of transitional Chapter 6, as established by 11.55.2(b)(2) of the Rules, requires that a transitional regulatory proposal must include the elements referred to in clause 6.8.2(c)(4) of current Chapter 6.

Clause 6.8.2(c)(4) of current Chapter 6 states that a regulatory proposal must include:

> for *direct control services*—indicative prices for each year of the *regulatory control period*[.]

Indicative prices for standard control services in the transitional period are listed in Attachment C. Tariffs in 2014/15 will reflect the reallocation of transmission costs in accordance with the AER's decision on dual function assets.[48]

Consistent with Rules clause 6.18.7A, ActewAGL Distribution's *2014/15 Network Pricing Proposal* will provide for tariffs designed to pass on to customers ActewAGL Distribution's costs for approved jurisdictional schemes. In the current 2009-14 regulatory period, the forecast costs of these schemes were included in the operating expenditure allowance and in distribution use-of-system (DUoS) prices.

3.10 Pricing methodology for transmission standard control services

The Rules require that:[49]

> *The relevant Distribution Network Service Provider must submit a proposed pricing methodology to the AER in respect of its transmission standard control service revenue as if it were a Transmission Network Service Provider as part of its regulatory proposal under Chapter 6, and Part E of Chapter 6A applies in respect of that pricing methodology (with the necessary changes).*

Clause 6.26(c) of transitional Chapter 6 requires ActewAGL Distribution to submit, as part of its regulatory proposal for the transitional regulatory control period, a proposed pricing methodology in respect of its transmission standard control service revenue. ActewAGL Distribution has included its pricing methodology at Attachment D of this transitional proposal.

[48] ActewAGL Distribution transmission infrastructure forms a greater share of high voltage customers' costs under the approved network pricing method. As a result, this group will benefit to a greater degree from the removal of these costs from distribution tariffs.

[49] Rules, clause 6.26(c) of transitional Chapter 6

4 Alternative control services

This chapter of the transitional proposal addresses matters relevant to the regulation of ActewAGL Distribution's services that the AER has classified as *alternative control services*—that is, certain metering services and ancillary network services.

4.1 Metering services

4.1.1 Classification and control mechanism

In the Stage 1 F&A paper the AER has proposed to retain the current alternative control service classification for type 5 to 7 metering services. Type 1 to 4 metering services are unregulated distribution services. ActewAGL Distribution accepts the AER's classification of metering services.

The AER has also determined in the Stage 1 F&A paper that the control mechanism for regulated metering services will change from the revenue cap applied in the current period to price caps for individual services. The AER's decision on the form of the control mechanism is binding for the subsequent period under clause 6.12.3(c) of the Rules, and subject to clause 11.56.3(j) also for the transitional period unless clause 11.56.3(a)(6) applies.

4.1.2 Indicative prices for metering services in the transitional period

Clause 11.55.2(b) of the Rules requires that a transitional regulatory proposal include the elements referred to in clause 6.8.2(c)(4) of current Chapter 6.

Clause 6.8.2(c)(4) of current Chapter 6 states that a regulatory proposal must include:

> *for direct control services—indicative prices for each year of the regulatory control period.*[50]

Clause 11.56.3(j) of the Rules says:

> *The prices for alternative control services that are provided by an affected DNSP during the transitional regulatory control period must be the prices that applied as at the end of the current regulatory control period of the affected DNSP escalated by the CPI as at that time.*

Indicative prices for alternative control metering services in the transitional period are listed in Attachment E. Consistent with clause 11.56.3(j), the indicative prices for 2014/15 are the 2013/14 prices escalated by the CPI.

[50] Rules, clause 6.8.2(c)(4)

4.1.3 Indicative estimate of demand for alternative control metering services

Under the transitional provisions in the Rules, ActewAGL Distribution's transitional proposal must include an indicative estimate of demand for direct control services which are subject to price caps, for the transitional period and each of the subsequent four regulatory years.[51]

ActewAGL Distribution's indicative estimates of the number of new meter installations are shown in Table 4.1. New meters associated with rooftop photovoltaic (PV) installations are shown separately to other new meter installations. The main driver of the indicative estimates of the number of new meter installations (not for PV) is the level of activity in the construction sector in the ACT.

The demand for meters for PV installations is driven by different factors, including government policies and incentives, the cost of PV installations and electricity prices. Demand has fallen significantly from the previous peak, when the ACT feed-in tariff scheme for small-scale (less than 30 kW) installations was still open to new applicants. Installation of new PV meters is expected to decline further in the next regulatory period but this does not necessarily reflect a decline in the uptake of PV installations. Rather, it is the case that following the introduction of net metering arrangements on 1 July 2013, PV readings can now be taken from the standard meters that have recently been installed or will be installed in the future without needing additional meter registers.

Table 4.1 Indicative estimates of new meter installations

	2014/15	2015/16	2016/17	2017/18	2018/19
New meters	8000	8000	8000	8000	8000
New PV meters	1000	900	800	700	600

In addition to the installation of customer-initiated new meters and new PV meters, ActewAGL Distribution plans to replace approximately 3,600 meters per year over the 2014-19 regulatory period. Overall the indicative estimates of new meter installations are subject to a high degree of uncertainty. Major changes to the regulatory framework for metering services were recommended by the AEMC in the November 2012 *Power of Choice* review, and in October 2013 the Standing Council on Energy and Resources (SCER) submitted a set of rule change proposals to implement the recommendations.

Under the current Rules, the *responsible person* for type 5 and 6 metering installations is the Local Network Service Provider (LNSP). ActewAGL Distribution is the responsible person for type 5 and 6 meters in the ACT. Other potential providers are not able to compete to provide type 5 and 6 meters. As SCER explains in its rule change request, under the proposed changes LNSPs would:

[51] Rules, clause 11.56.2(b)(7)

- no longer have the exclusive right to provide type 5, 6 or 7 metering services, unless other arrangements are specified by a jurisdiction.
- be required to compete with other accredited metering service providers to supply metering services to small customers.[52]

SCER also says that LNSPs would "have minimal stranding risk on their existing metering assets given an appropriate exit fee that has been approved by the AER",[53] but details are not provided on how such an exit fee would be determined.

Uncertainty about the final form of the metering rules, likely future developments in metering technology and costs, the extent to which competition will develop in markets for metering services, and future policies in relation to PV systems make it difficult to develop indicative estimates over a 5 year horizon.

4.2 Ancillary network services

4.2.1 Classification and control mechanisms

In the Stage 1 F&A paper the AER has classified ActewAGL Distribution's ancillary network services as alternative control services. As noted earlier in this transitional proposal (chapter 2, framework and approach), ActewAGL Distribution accepts this classification, and requests that two further services be added to the list. In addition, for pricing purposes the list of ancillary services provided by the AER in the Stage 1 F&A paper needs to be disaggregated further. For example, the AER service classification list includes one service "remove, reposition or disconnect service". This needs to be broken down into several different types of services which may be subject to different prices. The full list of proposed services is provided in Attachment F and as part of the connection policy in Attachment G.

The AER has also determined in the Stage 1 F&A paper that the control mechanism for ancillary services will be price caps on individual services. The AER's main consideration in deciding to apply price caps was that they will result in benefits in the provision of cost reflective prices.[54] The AER has also indicated that prices for certain ancillary network services will be determined on a quoted basis. [55]

In the Stage 1 F&A paper the AER has also set out alternative control services formulae to apply to two distinct situations: (i) where the services are classified as alternative control in the current period and remain alternative control services for the transitional and subsequent periods, and

[52] SCER Rule change proposal, p 23

[53] SCER Rule change proposal, p 23

[54] AER 2013, *Stage 1 F&A paper,* March, p 10

[55] AER 2013, *Stage 1 F&A paper,* March, p 39

(ii) where the services are currently classified as standard control services but are reclassified as alternative control services for the transitional and subsequent periods. Case (ii) is relevant for ActewAGL Distribution's ancillary services which are currently classified as standard control services (and called miscellaneous services), but will be re-classified as alternative control services. The AER explained in the discussion paper on the formulae to give effect to the control mechanisms:

> *... for alternative control services [for] which the classification of services has changed, caps on the prices of individual services will apply to the transitional regulatory control period.*[56]

AER staff have subsequently provided a further, and different, interpretation of the Rules requirements for alternative control services prices and set out preferred approaches for four different situations.[57] The AER's group 3 is relevant for most of ActewAGL Distribution's ancillary services (which are currently standard control services, with prices approved by the AER). The AER staff preferred approach is for the prices of these services from the final year of the current period to be indexed by CPI for the transitional period. The AER's group 4 is relevant to the new ancillary services introduced by ActewAGL Distribution in the transitional period. The AER's preferred approach is for price caps for these services to be set on a cost reflective basis for the transitional year.

4.2.2 ActewAGL Distribution's proposed approach to ancillary network services charges

ActewAGL Distribution has adopted the following approach to 2014/15 prices for ancillary services:

- Prices for services classified as (standard control) miscellaneous services for the 2009-14 regulatory period have been determined by escalating 2013/14 prices by CPI. For quoted services, ActewAGL Distribution has escalated labour rates by CPI.
- Prices for new ancillary services (not included in the schedule of prices for 2013/14) have been developed on a cost reflective basis. Where the new (or disaggregated) service is similar to a service offered in the current period, the current price has been escalated by CPI.

The proposed schedule of ancillary charges is provided in Table F.1 in Attachment F to this transitional proposal. The new ancillary charges and the basis on which they have been set for 2014/15 are also separately provided in Table F.2. ActewAGL Distribution has escalated the labour rates used in calculating quoted charges by CPI to determine the 2014/15 rates.

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[56] AER 2013, *Discussion paper, Formulae for control mechanisms, NSW and ACT DNSPs 2014-19 (revised),* February, p 13

[57] Letter to Networks NSW from AER General Manager Network Regulation dated 11 December 2013. (AER reference 44897)

ActewAGL Distribution's proposed approach to ancillary services pricing is consistent with the AER staff preferred approach, in that the group 3 prices have been escalated by CPI, and group 4 prices have been set on a cost reflective basis (and where a current similar or aggregated service exists, that price has been escalated by CPI). However, ActewAGL Distribution has not adopted the AER's preferred approach in relation to cost allocation for group 3 services. The AER staff preferred approach is for costs for the services re-classified as alternative control services to remain allocated to the standard control services building blocks for the transitional period. ActewAGL Distribution has removed the costs associated with the alternative control ancillary services from the standard control services building block. This approach is consistent with ActewAGL Distribution's current approved CAM. Contrary to the AER staff view that clause 11.56.3(i) requires these costs to be included in the standard control services building blocks, ActewAGL Distribution's understanding is that the clause does not preclude the reallocation of the alternative control services costs in the transitional period, in the circumstance where services classified as standard control services in the current regulatory control period are reclassified as alternative control services.

4.2.3 Indicative estimate of demand

As noted above in relation to metering services, the transitional provisions in the Rules require ActewAGL Distribution to provide an indicative estimate of the demand for alternative control services, for the transitional year and the subsequent four regulatory years. [58]

ActewAGL Distribution provides indicative estimates of demand for ancillary network services in Attachment F to this transitional proposal. Where possible and reasonable, these reflect actual volumes in calendar 2013; elsewhere, estimates reflect market knowledge and, where relevant, policy settings (for example, for micro generation).

[58] Rules, clause 11.56.2(b)(7)

5 Rate of return and inflation

This chapter of the transitional proposal addresses calculation of the rate of return. Under the transitional provisions, an affected DNSP must submit to the AER with its transitional proposal:

> *an indicative range for the rate of return that should be applied to the regulatory asset base referred to in subparagraph (1), which takes into account available market information and expected market trends, and has regard to the Rate of Return Guidelines published by the AER.*[59]

ActewAGL Distribution had limited time to consider the Rate of Return Guideline given it was published on 17 December 2013. ActewAGL Distribution reserves its position on the Rate of Return Guideline and its right to make submissions on any aspect of it following its further consideration by ActewAGL Distribution, and to provide new materials to support those submissions in its subsequent proposal.

ActewAGL Distribution has taken into account available market information and expected market trends and has had regard to the AER's Rate of Return Guideline in calculating its indicative range for the rate of return. The calculated rate of return estimate departs from the process set out in the guideline as ActewAGL Distribution is not satisfied that following it would result in an overall cost of capital estimate commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to ActewAGL Distribution's provision of standard control services. ActewAGL Distribution considers that the AER's cost of equity approach unduly omits relevant information and constrains its use to only inform the foundation model's parameter values rather than the overall cost of equity which could result in certain information being given disproportionate weight or prevent relevant information from being used as also outlined in the Energy Network Association's (ENA's) response to the AER's Draft Rate of Return Guideline.[60] The AER's foundation model is also out of step and generates a significantly lower cost of equity estimate than other independent models. ActewAGL Distribution will address the rate of return guideline in detail in its subsequent proposal in May 2014.

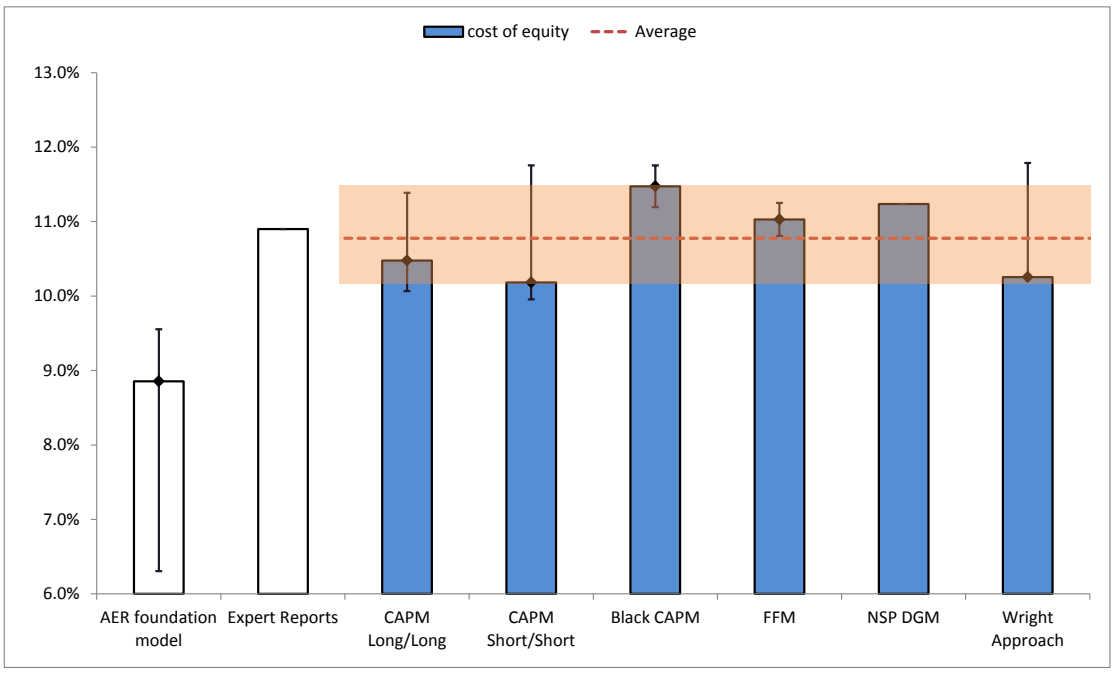
5.1 Cost of equity

For this transitional proposal, ActewAGL Distribution has had regard to a number of different cost of equity models put forward earlier in the cost of capital consultation process. The estimates of these models are shown in Figure 5.1 and draw on material presented by the AER and the ENA.

[59] Rules, clause 11.56.2(b)(2)

[60] ENA 2013, *Response to the Draft Rate of Return Guideline of the Australian Energy Regulator*,11 October

Figure 5.1 Estimate of the cost on equity under different models



In Figure 5.1 ActewAGL Distribution has calculated the risk free rate of 4.31 per cent using the last 20 business day observations until 31 December 2013 and applied this to the different models. The 'Long/Long' CAPM uses a sample period of ten years ending on 31 December 2013. ActewAGL Distribution has used an equity beta estimate of 0.82 for the CAPM and 0.79 for the Fama-French model. For the market risk premium (MRP), ActewAGL Distribution has used 7.19 per cent for the models using a 20 days sample period, based on an average of eight methods,[61] and has used 6.5 per cent for the Long/Long CAPM. The Wright approach gives an estimate of the cost of equity of 10.25 per cent.[62]

Having estimated the cost of equity for the different models, ActewAGL Distribution has calculated a cost of equity range of 9.97-11.79 per cent. For the transitional proposal, ActewAGL Distribution has used Wright's approach to calculate the point estimate.

[61] The eight methods are: historical average (6.5%), Wright approach (7.25-7.79%), the AMP method (7.19%), Lally's MRP estimate corrected by CEG (6.39-8.89%), Bloomberg estimate (7.6%), SFG's DGM (7.0%), AER's DGM (5.47-6.91%) and IPART's MRP estimate (7.90%).

[62] NERA June 2013, 'The Market, Size and Value of Premiums' shows that the Brailsford et al data (BHM) for the average real realised market return for the Australian market, inclusive of the value of imputation credits, from 1883 to 2011 is 8.84 per cent. Adding RBA's long term mid-point target inflation of 2.50 per cent to the historical average realised real market return provides an estimate of the current nominal expected market return of 11.56 per cent. Subtracting the prevailing risk free rate estimate of 4.31 per cent results in an MRP estimate of 7.25 per cent. ActewAGL Distribution has adjusted this market return parameter to an industry specific return of 10.25 per cent using a beta of 0.82.

The Wright approach is consistent with the AER's proposal in the Rate of Return Guideline's "to adopt a forward looking risk free rate that is commensurate with prevailing conditions in the market for funds at the commencement of the regulatory control period".[63] ActewAGL Distribution has also shown in Figure 5.1 that this estimate is consistent with, although at the low end of, the range provided by all of the internally consistent estimates in Figure 1 which rely on current market data or use market data in different ways.

ActewAGL Distribution considers that stability of allowed returns is a desirable attribute of the regulatory regime – for both investors and customers – as it will have economic benefits by supporting stable prices and steady investments in the network. Selecting the Wright approach as the point estimate for the cost of equity allowance can achieve this while being consistent with prevailing market conditions.

5.2 Cost of debt

For the transitional proposal, ActewAGL Distribution has used the annualised cost of debt for a ten year term maturity with a BBB credit rating provided by RBA.[64] As an averaging period, ActewAGL Distribution has averaged over the full length of the data provided by RBA, nine years as of January 2014. This generates a cost of debt estimate of 7.96 per cent which ActewAGL Distribution has used in this transitional proposal. Although not subject to this transitional proposal, ActewAGL Distribution considers that this approach is also consistent with clause 6.5.2(j)(2).

ActewAGL Distribution considers that the portfolio approach or trailing average has always been an appropriate financing practice, and as such a transition is not necessary for businesses that are able to follow this approach. While some DNSPs may support transitions from one benchmark (that is, the current approach) to another (the trailing average approach), this reflects their own idiosyncratic debt funding strategy under the former Chapter 6.[65] The former Chapter 6 created a regulatory allowance unable to be hedged and, consequently, different DNSPs adopted different debt strategies. The AER's proposed transition arrangement may be attractive to businesses that used interest rate swap contracts to reset their base interest rate exposure at the beginning of each regulatory period. By contrast, ActewAGL Distribution is able to move immediately to implement a trailing average approach. ActewAGL Distribution considers that transitional arrangements should be used to allow DNSPs, which would like to move to a

[63] AER 2013, *Better Regulation | Rate of Return guideline*, December, p 15

[64] ActewAGL Distribution also notes that estimates based on an extrapolated Bloomberg Fair Value Curve were very similar to those based the RBA data. This serves as a supporting cross check on the cost of debt.

[65] The former Chapter 6 being Chapter 6 of the Rules as in force immediately before Schedules 1 and 3 of the *National Electricity (Economic Regulation of Network Service Providers) Rule 2012* came into force. Schedules 1 and 3 of the *National Electricity (Economic Regulation of Network Service Providers) Rule 2012* came into force on 29 November 2012.

trailing portfolio approach under the new Rules, but which face difficulty with an immediate switchover, to do so, and not as a mechanism to adjust from one model of efficient financing practice to another.

Setting the cost of debt allowance by the portfolio approach has economic benefits in the interest of all stakeholders, as it supports price stability and steady investment in the network such that customers would not face unnecessary volatility in reliability or tariffs across multiple control periods due to volatile market conditions.

5.3 Indicative range for the rate of return (nominal vanilla WACC)

Using a range and point estimate for the cost of equity and a point estimate for the cost of debt (assuming 60 per cent gearing) results in an overall nominal vanilla WACC range of 8.77 to 9.49 per cent, with a point estimate of 8.88 per cent.

5.4 Gamma

Consistent with the Australian Competition Tribunal's decision in 2011[66] and IPART's Review of WACC Methodology,[67] ActewAGL Distribution has applied a gamma value of 25 per cent for the transitional proposal.

ActewAGL Distribution considers that there has not been sufficient time to understand and consult on the changes in the conceptual approach to gamma put forward by the AER.

Advice from SFG to the Queensland Competition Authority[68] points to significant flaws and inconsistencies in the AER's reasoning in support of the substantially increased gamma in the final guideline, and that several post-2000 dividend drop off studies estimate gamma at similar or lower levels to SFG's updated market study which the Tribunal relied on in making its decision in 2011.

ActewAGL Distribution intends to consider this issue more fully in its subsequent submission in May 2014, but has referred to this advice from SFG, the Tribunal decision and IPART's recent WACC methodology final decision in using a value of 0.25 for gamma. ActewAGL Distribution provides an indicative estimate of the cost of corporate tax, using a gamma of 0.25, in Table 3.7, consistent with clause 11.56.2(b)(4) of the transitional Rules.

[66] Australian Competition Tribunal 2011, *Application by Energex Limited (Gamma) (No 5) [2011] ACompT 9*, 12 May, paragraph 42

[67] IPART 2013, *Review of WACC Methodology*, December.

[68] SFG 2013, 'A regulatory process for estimating gamma', QCA WACC Workshop 13 December 2013.

5.5 Forecast inflation

The expected inflation rate is used to forecast nominal allowed revenues and to index the RAB. For the transitional proposal, ActewAGL Distribution has used the method applied by the AER in its decisions for Victorian gas businesses,[69] though other methods are available.

At the time of this submission, the RBA's most recent Statement of Monetary Policy is November 2013[70]. This includes inflation forecasts 1½ years into the forthcoming period, of which one year's midpoint forecast is 2.0 per cent and the remainder are equal to the midpoint of the RBA's target band for inflation of 2.5 per cent. ActewAGL Distribution has calculated the appropriate 10-year geometric mean of the 2.0 per cent forecast and assumed 2.5 per cent for the remainder of the 10 years. This leads to an average inflation forecast of 2.45 per cent, as applied in the PTRMs.

[69] AER 2013, *Access arrangement final decision Envestra Ltd 2013-17 Part 2: Attachments*, March, p151

[70] RBA 2013, *Statement on Monetary Policy*, November.

6 Connection policy

This chapter provides an overview of the regulatory requirements and the key elements of ActewAGL Distribution's proposed connection policy. The proposed connection policy is provided as Attachment G to this transitional proposal.

6.1 Rule requirements

6.1.1 Connection policy requirements

Under clause 11.55.2(b)(2) of the Rules a transitional regulatory proposal must include the elements referred to in clause 6.8.2(c)(5A) of current Chapter 6.

Clause 6.8.2(c)(5A) of the Rules requires that a regulatory proposal include the proposed *connection policy.*

Clause 5A.A.1 of the Rules defines a *connection policy* in the following terms:

> ***connection policy*** *means a document, approved as a connection policy by the AER under Chapter 6, Part E, setting out the circumstances in which* connection charges *are payable and the basis for determining the amount of such charges*

Chapter 6 of the Rules contains the connection policy requirements, that is, what must be submitted and the approval process. Clause 6.7A.1 states:

(a) A Distribution Network Service Provider must prepare a document (its proposed connection policy) setting out the circumstances in which it may require a retail customer or real estate developer to pay a connection charge, for the provision of a connection service under Chapter 5A.

(b) The proposed connection policy:

(1) must be consistent with:

(i) the connection charge principles; and

(ii) the connection charge guidelines; and

(2) must specify:

(i) the categories of persons that may be required to pay a connection charge and the circumstances in which such a requirement may be imposed; and

(ii) the aspects of a connection service for which a connection charge may be made; and

(iii) the basis on which connection charges are determined; and

(iv) *the manner in which connection charges are to be paid (or equivalent consideration is to be given); and*

(v) *a threshold (based on capacity or any other measure identified in the connection charge guidelines) below which a retail customer (not being a non-registered embedded generator or a real estate developer) will not be liable for a connection charge for an augmentation other than an extension.*

The connection charge principles referred to in 6.7A.1(a)(1)(i) are set out in Chapter 5A of the Rules.

6.2 Proposed connection policy

ActewAGL Distribution's proposed connection policy is provided in Attachment G to this transitional proposal.

ActewAGL Distribution applies the following principles when determining the charges for connection services:

- Connection applicants will not be required to make a capital contribution toward the cost of shared network augmentation where the connection is a basic connection service or the customer's estimated demand is below the threshold specified in the connection policy;
- Connection applicants may be required to make a capital contribution toward the cost of premises connection assets and network extensions. These charges will be based on the difference between the estimated incremental costs and incremental revenues associated with the connection (consistent with the AER connection charge guidelines). Depending on the type of connection, this assessment (known as the incremental cost-revenue-test) is applied to a category of connections (for example residential services) or to specific connection requests. No capital contribution for premises connection assets and extensions will be required for the majority of typical services and low voltage connections provided at the least cost technically acceptable standard;
- Connection applicants requesting a connection service of a higher standard than the least cost technically acceptable standard will be required to pay the additional costs of the higher standard service. Customers with special connection requirements (for example difficult site access) will also be required to pay the additional costs;
- Connection applicants will also be required to pay for ancillary services, such as temporary connections, required as part of their connection and metering costs associated with new or changed connections. These charges will be set on a cost reflective basis, with standard charges applying to typical services while non-typical services will be offered on a quoted basis. The charges will be approved by the AER in the relevant ACT distribution determination.

6.3 Model standing offers

Under Chapter 5A of the Rules, DNSPs have an obligation to submit for AER approval a model standing offer for basic connection services. Clause 5A.B.2(a) states:

> *A* Distribution Network Service Provider *must submit for the AER's approval a proposed* model standing offer *to provide* basic connection services *for each class or (subclass) of* basic connection services *on specified terms and conditions.*

Clause 5A.B.2 also contains a detailed list of what a model standing offer must cover.

Part ZP of Chapter 11 (Interim Connection Charging Rules) specifies exclusions, qualifications and modifications for the ACT under Clause 11.46.4. Clause 11.46.4(d) and (e) state:

> *(d) The ACT distributor's obligation to have a model standing offer to provide basic connection services (clause 5A.B.1) operates during the transition period but the AER's approval of the model standing offer is not required until the transition date.*
>
> *(e) The ACT distributor's obligation to submit for the AER's approval a proposed model standing offer to provide basic connection services (Clause 5A.B.2(a)) does not arise until the ACT distributor is obliged to submit a regulatory proposal for the regulatory control period first commencing after the transition date.*

Clause 11.46.4 requires ActewAGL Distribution to submit the proposed model standing offer to provide basic connection services for AER approval at the same time it submits its proposal for the transitional control period.

ActewAGL Distribution has submitted for AER approval two model standing offers: one for basic connection services with small scale embedded generation, and one for basic connection services without small scale embedded generation. The two model standing offers are provided in Attachment G.

7 Other matters

7.1 Jurisdictional scheme amounts

7.1.1 Rules requirements

The jurisdictional scheme requirements in the Rules were introduced in 2010, during the current regulatory period. These requirements designated the ACT feed-in tariff for small scale generation as a *jurisdictional scheme* under clause 6.18.7A(e)(1)(i) of the Rules. The jurisdictional scheme arrangements in the Rules also include provision for DNSPs to request the AER to determine that a scheme is a jurisdictional scheme.[71]

ActewAGL Distribution wrote to the AER on 6 January 2014 requesting the AER to determine that the Energy Industry Levy, the Utilities Network Facilities Tax and the Feed-in Tariff (Large Scale) are jurisdictional schemes. On 29 January 2014, the AER published its determination that each of these schemes is a jurisdictional scheme.[72] As a result, forecast amounts for the proposed jurisdictional schemes are not included in the indicative opex estimates for 2014-19.

Under the transitional provisions in clause 11.35.2(a) ActewAGL Distribution must comply with the jurisdictional scheme pricing proposal requirements from the date it is "required to submit a pricing proposal for the first regulatory period of the next regulatory control period." ActewAGL Distribution will submit its proposal for recovery of jurisdictional scheme amounts as part of the *2014/15 Network Pricing Proposal*.

Clauses 11.56.3(a)(14) and (15) state that the AER must

> *(14) specify, as the manner in which the affected DNSP is to report to the AER on its recovery of designated pricing proposal charges and jurisdictional scheme amounts, the manner that was decided for the current regulatory control period of the affected DNSP, except to the extent the designated pricing proposal charge or jurisdictional scheme was not subject to such a decision for that current regulatory control period, in which case the manner of reporting must (to that extent) be as decided by the AER in the distribution determination for the transitional regulatory control period; and*
>
> *(15) specify, as the adjustments to be made to subsequent pricing proposals to account for over or under recovery of any designated pricing proposal charges or jurisdictional scheme amounts, the adjustments that were decided for the current regulatory control period of the affected DNSP, except to the extent the designated pricing proposal charge or jurisdictional scheme was not subject to such a decision for that current regulatory control period, in which case the adjustments must (to that extent) be as*

[71] Rules, clause 6.18.7A(f)

[72] AER 2014, *Determination: ActewAGL Distribution's request for schemes to be determined as jurisdictional schemes*, January. AER reference: 53600.

decided by the AER in the distribution determination for the transitional regulatory control period.

These clauses require the AER to specify the manner in which ActewAGL Distribution is to report on jurisdictional scheme amounts and to make adjustments to its 2014/15 pricing proposal for over or under recovery in the current regulatory period.

7.1.2 ActewAGL Distribution proposal for jurisdictional scheme amounts

ActewAGL Distribution proposes to carry out adjustments to jurisdictional scheme amounts for the relevant jurisdictional scheme for the purposes of clause 6.18.7A(b) and report to the AER on the recovery process under clause 6.18.7A(a) to (c) with a jurisdictional scheme overs and unders account. This approach is based on the method determined by the AER in the *2009-14 ACT Distribution Determination* in respect of designated pricing proposal charges.[73] ActewAGL Distribution notes that clause 6.18.7A(c)(1) requires that over and under recovery amounts must be calculated consistent with the method determined by the AER in the relevant distribution determination in respect of designated pricing proposal charges, where no method has been determined by the AER for jurisdictional scheme amounts.

As part of the annual pricing proposal for each regulatory year, starting from 2014/15, ActewAGL Distribution proposes to provide the following amounts for the most recently completed regulatory year, the current regulatory year and the next regulatory year:

1. the opening balance for each year;
2. the interest accrued on the opening balance for each year, calculated at the rate of the post-tax nominal rate of return as approved by the AER in its distribution determination;
3. either the amount representing the revenue recovered from jurisdictional schemes charges applied in respect of that year or included (as in the case of 2012/13 and 2013/14) in the operating expenditure allowance within the 2009-14 Distribution Determination, less the amounts of all jurisdictional scheme related payments made by ActewAGL Distribution in respect of that year;
4. an adjustment to the net amount in item 3 by six months of interest, accrued at the approved nominal rate of return; and
5. a summation of the above amounts to derive the closing balance for each year.

ActewAGL Distribution has amended item 3 to reflect that were no jurisdictional scheme charges in 2012/13 and 2013/14. Instead ActewAGL Distribution will use the forecast operating expenditure allowances included in the 2009-14 Distribution Determination for the schemes

[73] AER 2009, *Final decision: Australian Capital Territory distribution determination, 2009–10 to 2013–14*, April, p 182

determined to be a jurisdictional scheme.[74] The amendment ensures that ActewAGL Distribution is not able to recover from customers more or less than the jurisdictional scheme amounts it incurs, consistent with clause 6.18.7A(c)(2). ActewAGL Distribution proposes to provide details on these calculations in the relevant pricing proposals.

ActewAGL Distribution proposes to provide details of its calculations in the format set out in Table 7.1. In proposing variations to the amount and structure of jurisdictional scheme charges, ActewAGL Distribution is to achieve a zero expected balance on its jurisdictional scheme overs and unders account at the end of each regulatory year in the next regulatory control period.

ActewAGL Distribution proposes that the basis for estimated and forecast jurisdictional scheme payments for each jurisdictional scheme is set out in each pricing proposal.

Table 7.1 Example calculation for Jurisdictional Scheme overs and unders account

($'000)	*year t-2 (actual)*	*year t-1 (estimate)*	*year t (forecast)*
Jurisdictional schemes revenue	9,252	9,126	11,494
Jurisdictional scheme 1 payments	1,100	1,091	1,200
Jurisdictional scheme 2 payments	8,545	8,590	9,236
Total Jurisdictional Scheme Payments	9,646	9,680	10,435
Over (under) recovery for financial year	-393	-554	1,059
Overs and unders account			
Annual rate of interest applicable to balances	9.70%	9.70%	8.88%
Semi-annual rate of interest	4.74%	4.74%	4.35%
Opening balance	15	-396	-1,015
Interest on opening balance	1	-38	-90
Over/ under recovery for financial year	-393	-554	1,059
Interest on over/ under recovery	-19	-26	46
Closing balance	-396	-1,015	0

[74] For the 2009-14 regulatory period forecast amounts for schemes determined to be jurisdictional schemes are included in the operating expenditure forecasts. During the period, ActewAGL Distribution has submitted applications for AER approval to pass through in network tariffs differences between forecast and actual payments. Under the jurisdictional scheme arrangements, introduced in 2010, forecasts payments for the jurisdictional schemes will not be included in the expenditure forecasts from 2014/15 onwards.

7.2 Identification of confidential information

Clause 6.8.2(c)(6) of the Rules requires that:

> *A regulatory proposal must include an identification of any parts of the regulatory proposal the DNSP claims to be confidential and wants suppressed from publication on that ground in accordance with the Distribution Confidentiality Guidelines.*

Clause 11.55.2(b) of the Savings and transitional measure confirms that:

> *A transitional regulatory proposal must include (but need not be limited to) …*
>
> *(2) the elements referred to in clauses 6.8.2(c)(4), (5A) and (6) of the current Chapter 6*

ActewAGL Distribution is not claiming confidentiality over any parts of the transitional proposal or its accompanying supporting information.

Appendix 1 Matters required to be addressed in the Transitional Regulatory Proposal

ActewAGL Distribution's transitional proposal provides the material required under the transitional provisions of Part ZW of Chapter 11 of the Rules. Division 2 of that Part stipulates the requirements for a transitional proposal by modifying the requirements under Chapter 6 of the Rules for a regulatory proposal as well as establishing additional matters specific to a transitional proposal. These are summarised, respectively, in Table 0.1 below including, where appropriate, references to the location of the material in this transitional proposal. This follows the definition of *transitional chapter 6* in Rule 11.55.2 and the requirement of Rule 11.56.2(a) that:

> *a transitional regulatory proposal must comply with the requirements of transitional Chapter 6 ... and the remainder of Division 2 of Chapter 11, Part ZW.*

Table 0.1 Compliance with clause 6.8.2 of Transitional Chapter 6

Relevant rule	*Issue*	*Requirement*	*Transitional Chapter 6 requirement*	*Transitional provision*	*Reference in transitional proposal*
6.8.2(a)	Requirement to submit a regulatory proposal	A Distribution Network Service Provider must, whenever required to do so under paragraph (b), submit a regulatory proposal to the AER for distribution services provided by means of, or in connection with, the Distribution Network Service Provider's distribution system.	(a) An affected DNSP must submit a transitional regulatory proposal to the AER at least 5 months before the expiry of the current regulatory control period of the affected DNSP. (b) A transitional regulatory proposal must include (but need not be limited to): (1) an amount that the affected DNSP proposes will be the annual revenue requirement for the transitional regulatory control period, it being acknowledged that such amount will not be calculated in accordance with the provisions of the Rules that otherwise would apply to the calculation of the annual revenue	11.55.2(b) (Transitional 6.8.2(a)-(b)(1))	The current submission by 31 January 2014 Revenue requirement for standard control services derived in Section 3.7
6.8.2(b)	Timing of submission of regulatory proposal	A regulatory proposal must be submitted: (1) at least 17 months before the expiry of a distribution determination that applies to the Distribution Network Service Provider; or (2) if no distribution determination applies to the Distribution Network Service Provider, within 3			

Relevant rule	*Issue*	*Requirement*	*Transitional Chapter 6 requirement*	*Transitional provision*	*Reference in transitional proposal*
		months after being required to do so by the AER.	requirement; and (2) the elements referred to in clauses 6.8.2(c)(4), (5A) and (6) of the current Chapter 6.		
6.8.2(c)(4)	Indicative prices for direct control services	A regulatory proposal must include indicative prices for each year of the regulatory control period for direct control services.	A transitional regulatory proposal must include (but need not be limited to) the elements referred to in clauses 6.8.2(c)(4), (5A) and (6) of the current Chapter 6.	11.55.2(b) (Transitional 6.8.2(b)(2))	Standard control services: Sections 3.9 and 3.10, and Attachments C and D Alternative control services: Sections 4.1 and 4.2, and Attachments E and F
6.8.2(c)(5A)	Connection Policy	A regulatory proposal must include the proposed connection policy.	A transitional regulatory proposal must include (but need not be limited to) the elements referred to in clauses 6.8.2(c)(4), (5A) and (6) of the current Chapter 6.	11.55.2(b) (Transitional 6.8.2(b)(2))	Chapter 6 and Attachment G
6.8.2(c)(6)	Identification of confidential parts of the regulatory proposal	A regulatory proposal must include an identification of any parts of the regulatory proposal the DNSP claims to be confidential and wants suppressed from publication on that ground in accordance with the Distribution Confidentiality Guidelines.	A transitional regulatory proposal must include (but need not be limited to) the elements referred to in clauses 6.8.2(c)(4), (5A) and (6) of the current Chapter 6.	11.55.2(b) (Transitional 6.8.2(b)(2))	Section 7.2

Clause 11.56.2(b) of the Rules incorporates a list of information that an affected DNSP must submit "at the same time as [it] submits its transitional regulatory proposal to the AER". This list from clause 11.56.2(b) is reproduced in Table 0.2 with a reference to where the information can be found in the transitional proposal.

Table 0.2 Compliance with Rule 11.56.2—Additional information to accompany the transitional regulatory proposal

Relevant Rule	*Requirement of transitional proposal*	*Transitional proposal reference*
11.56.2(b)(1)	An indicative estimate of the value of the regulatory asset base for the relevant distribution system as at the beginning of the transitional regulatory control period	Section 3.2
11.56.2(b)(2)	An indicative range for the rate of return that should be applied to the regulatory asset base referred to in subparagraph (1), which takes into account available market information and expected market trends, and has regard to the Rate of Return Guidelines published by the AER	Chapter 5
11.56.2(b)(3)	An indicative estimate of forecast operating expenditure and capital expenditure for the transitional regulatory control period;	Section 3.4
11.56.2(b)(4)	an indicative estimate of the cost of corporate tax and depreciation for the transitional regulatory control period	Section 3.5
11.56.2(b)(5)	An indicative range of the affected DNSP's revenue requirements, for the provision of standard control services, for the transitional regulatory control period and for each of the subsequent four regulatory years, which is based on the information and inputs referred to in subparagraphs (1) to (4) and such other information or inputs as the affected DNSP considers to be relevant and as it includes in the information that accompanies the transitional regulatory proposal	Chapter 3 and Attachment A
11.56.2(b)(6)	A summary of the affected DNSP's plan for expenditure for the transitional regulatory control period and the subsequent four regulatory years, together with an explanation of how this proposed expenditure is consistent with the proposed annual revenue requirement that is set out in the transitional regulatory proposal	Section 3.4 and Attachment B
11.56.2(b)(7)	Where the control mechanism that is to apply for a direct control service under clause 11.56.3(a)(5) or (6) is or includes a price cap or a price control, an indicative estimate of demand (including customer numbers, energy demand and maximum demand) for that type of direct control service for the transitional regulatory control period and each of the subsequent four regulatory years	Standard control services: Section 3.8 Alternative control services: Sections 4.1 and 4.2, and Attachment F
11.56.2(b)(8)	The revenue that the affected DNSP estimates it will earn from the provision of standard control services during the last regulatory year of its current regulatory control period	Section 3.7
11.56.2(b)(9)	Such other information or inputs as the affected DNSP considers to be relevant to the approval by the AER, under clause 11.56.3, of its annual revenue requirement for the transitional regulatory control period.	Section 3.6

Appendix 2 Glossary

Term	*Meaning*
ACT	Australian Capital Territory
ACTEW	ACTEW Corporation Ltd
ActewAGL Distribution	See section 1.2
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AGL	AGL Energy Ltd
AMP	Asset Management Plan
CAPM	Capital Asset Pricing Model
CEG	Competition Economists Group
CT/VT	Current transformer/voltage transformer
DGM	Dividend Growth Model
DNSP	Distribution Network Service Provider
DUOS	Distribution Use of System
EBSS	Efficiency Benefit Sharing Scheme
ENA	Energy Networks Association
FFM	Fama-French three factor model
HV	High Voltage
IPART	Independent Pricing and Review Tribunal
LNSP	Local Network Service Provider
LV	Low Voltage
MCE	(former) Ministerial Council on Energy (now SCER)
MRP	Market Risk Premium
NECF	National Energy Customer Framework
NEM	National Electricity Market
NMI	National Metering Identifier

Term	*Meaning*
NPEF	National Planning and Expansion Framework
NSP	Network Service Provider
NSW	New South Wales
Stage 1 F&A	AER Stage 1 Framework and Approach (paper)
Stage 2 F&A	AER Stage 2 Framework and Approach (paper)
POE	Point of Entry
PTRM	Post Tax Revenue Model
PV	Photovoltaic
QCA	Queensland Competition Authority
RAB	Regulated Asset Base
RBA	Reserve Bank of Australia
RFM	Roll Forward Model
SCER	Standing Council on Energy and Resources
SFG	Strategic Finance Group
SKM	Sinclair Knight Merz
TAB	Tax Asset Base
TNSP	Transmission Network Service Provider
TOU	Time of Use
WACC	Weighted average cost of capital

Attachment A Revenue and roll forward models

A1 Post tax revenue model—distribution standard control services

A2 Post tax revenue model—transmission standard control services

A3 Roll forward model—distribution standard control services

A4 Roll forward model—transmission standard control services

Attachment B Summary of expenditure plans for the transitional period and subsequent period

Attachment B to Transitional Regulatory Proposal 2014/15

Expenditure plan summary

2014/15 – 2018/19

January 2014

Contents

1 Introduction

Under the transitional provisions for affected DNSPs in Division 2 of Part ZW of Chapter 11 of the Rules, clause 11.56.2(b)(6) specifies that an affected DNSP must submit to the AER with its transitional proposal:

> *a summary of the affected DNSP's plan for expenditure for the transitional regulatory control period and the subsequent four regulatory years, together with an explanation of how this proposed expenditure is consistent with the proposed annual revenue requirement that is set out in the transitional regulatory proposal.*

This document provides a summary of ActewAGL Distribution's capital and core network operating expenditure[1] plans for the 2014-19 regulatory period.

The indicative expenditure forecasts contained in this summary are ActewAGL Distribution's best estimate of the costs associated with its capital and operating plans for the 2014-19 regulatory period at the date of this transitional proposal. These estimates will be updated and provided in ActewAGL Distribution's subsequent proposal on 31 May 2014.

Consistent with clause 11.56.4(o) of the Rules, ActewAGL Distribution notified the AER of its approach to forecasting capital and operating expenditure for the 2014-19 regulatory period in November 2013. The indicative estimates provided in this expenditure plan have been prepared using ActewAGL Distribution's expenditure forecasting methodology.

As required under clause 11.56.2(b)(6) of the Rules, the indicative estimates of expenditure contained in the transitional regulatory proposal and this expenditure plan summary are consistent with the capital and operating expenditure forecasts that have been applied in ActewAGL Distribution's PTRMs[2] to calculate the annual revenue requirement, and are therefore consistent with the proposed annual requirement as set out in the transitional regulatory proposal. ActewAGL Distribution's PTRMs are provided as Attachment 1.

All dollars referenced in this expenditure plan summary are expressed in real 2013/14 dollar terms.

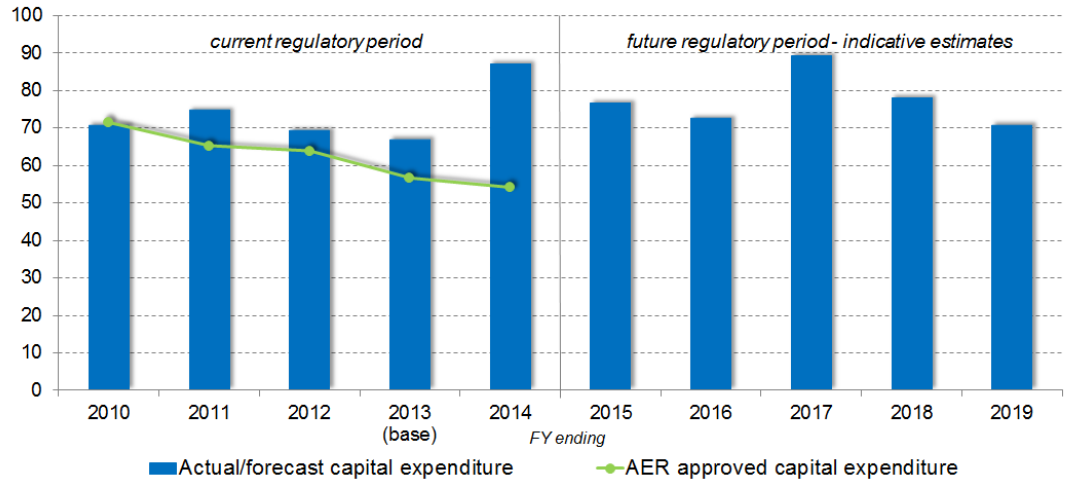
[1] Core network operating expenditure comprises network maintenance costs, network operating costs and 'other' expenditure.
[2] Post Tax Revenue Models

2 Capital expenditure – standard control services

ActewAGL Distribution's indicative estimate for capital expenditure net of capital contributions in 2014/15 is $76.5 million. Estimated average annual forecast capital expenditure of $77.3 million for the 2014-19 period will be slightly above actual average annual expenditure of $73.6 million for the 2009-14 period, totalling approximately $386 million for the 2014-19 period.

Figure 1 below shows actual (and estimated 2013/14) capital expenditure for the current period along with indicative estimates for capital expenditure in the 2014-19 regulatory period.

Figure 1 Net capital expenditure 2009/10 to 2018/19, ($million, 2013/14)



2.1 Overview of historical expenditure 2009-14

In April 2009, the AER released its Final Decision on prices for electricity distribution services in the ACT for the period 2009/10 to 2013/14. This included the capital expenditure allowance shown in Table 1 below.

The capital expenditure forecasts submitted to the AER for the current period were based on ActewAGL Distribution's Network *Ten Year Augmentation Plan* in 2008, and as such were the best estimates at that time of the efficient and prudent capital expenditure requirements for each year of the current period.

Table 1 – Net capital expenditure 2009/10 – 2013/14 ($million, 2013/14)

	2009/10	2010/11	2011/12	2012/13	2013/14	Total
AER allowance	71.4	65.2	63.8	56.7	54.2	**311.4**
ActewAGL Distribution actual/forecast*	70.5	74.5	69.1	66.8	87.0	**367.9**
Variance	(0.9)	9.2	5.3	10.1	32.8	**56.5**

*Actual expenditure for 2009-2013, forecast expenditure for 2013/14

ActewAGL Distribution's actual capital expenditure for the current period will exceed the regulated allowance determined by the AER in 2009 by approximately $56.5 million ($2013/14).

Key drivers of the higher than forecast capital expenditure over the current period include:

- Higher than forecast customer initiated capital works due to strong growth in commercial and industrial developments and new urban development midway through the regulatory period;
- The decision to acquire land and construct a warehouse office space at Greenway to accommodate ActewAGL Distribution's Logistics Branch in 2010/11, as an alternative to re-leasing the Fyshwick logistics site. The existing lease arrangement at Fyshwick was due to expire in March 2010 and rental charges for the property were to increase significantly. Relocating Logistics staff from Fyshwick to Greenway has resulted in improved working conditions for Logistics staff and increased productivity of field crews due to reduced travel time. This expenditure was not included in ActewAGL Distribution's 2008 regulatory proposal;
- Higher than anticipated asset augmentation costs relating to the construction of the new Eastlake zone substation, augmentation of the Civic zone substations, and the construction of Stage 1 of the Southern Supply to ACT project[3] as required by the Electricity Transmission Regulation 2006; and
- Implementation of a major Systems Replacement Program (SRP) aimed at replacing and refreshing key operational (OSRP) and corporate (CSRP) systems that had become increasingly ineffective in supporting core business functions, or because they were either nearing capacity, end of useful life or vendor support arrangements. The scale of investment undertaken during the current period is greater than the Network information technology (IT) capital expenditure allowance forecast at the time of the last regulatory determination, but has been necessary to ensure ActewAGL Distribution is able to maintain current service standards, reduce risk and meet emerging consumer level data and regulatory reporting requirements. The OSRP and CSRP projects are discussed further in sections 2.2.5 and 2.2.7 below.

[3] This involved the construction of two 132kV lines from the ACT's southern bulk supply point to provide the ACT with a second point of supply.

2.2 Overview of forecast expenditure 2014-19

ActewAGL Distribution's capital expenditure plan for the 2014-19 regulatory period continues key capital expenditure reform programs that were initiated during the current period, and will ensure the ongoing reliability of the network whilst minimising the total life cycle cost of providing network services.

Expenditure on asset renewal and replacement expenditure will increase in the transitional regulatory period as ActewAGL Distribution extends its asset replacement focus to include underground cables, which in many cases have reached the end of their useful life, or where asset replacement has become a viable alternative to repairing cables on a piecemeal basis. Suburban pole replacement will continue to be a significant driver of capital expenditure outcomes in the 2014-19 regulatory period as ActewAGL Distribution continues the pole replacement program that was approved by the AER in 2009.

Key augmentation projects to be undertaken during the period include the construction of a new zone substation to meet demand from urban developments in Molonglo and North Weston, an upgrade to the Belconnen Zone substation to ensure ongoing reliability in the Belconnen region, and Stage 2 of the Southern Supply to the ACT project.

The capital program also includes the completion and extension of various OSRP and CSRP projects that were commenced in the current regulatory period.

A summary of indicative estimated capital expenditure by category for the 2014-19 regulatory period is provided in Table 2 below. Each category is then discussed in more detail.

Table 2 Indicative estimated standard control capital expenditure for 2014-19 ($million, 2013/14)

	2014/15	*2015/16*	*2016/17*	*2017/18*	*2018/19*	*Total*
Asset renewal/ replacement	26.8	28.5	28.4	28.0	27.2	139.0
Customer initiated	23.7	24.0	21.6	23.1	26.8	119.2
Augmentation	9.7	16.8	35.7	26.9	17.0	106.1
Reliability and quality improvements	1.7	1.9	3.2	2.0	0.2	9.0
Network IT systems	8.9	1.6	1.0	0.7	1.5	13.5
Less capital contributions	*(8.4)*	*(8.5)*	*(7.7)*	*(7.9)*	*(9.4)*	*(42.0)*
Non-system assets	10.9	7.0	5.7	3.1	5.7	32.3
Corporate services business support	3.3	1.1	1.2	2.0	1.7	9.3
Total capital expenditure	**76.5**	**72.4**	**89.1**	**77.9**	**70.6**	**386.4**

2.2.1 Asset renewal and replacement expenditure

Asset renewal and replacement expenditure in the 2014-19 regulatory period is expected to be significantly higher than renewal and replacement expenditure in the current period.

The biggest replacement and renewal expenditure item in this category is the ongoing pole replacement program that was included in the expenditure approved by the AER in the current determination and will continue beyond the 2014-19 regulatory period. Planned replacement of underground cables will commence in the transitional year as assets reach the end of their useful life, or where replacement becomes an economic alternative to reactive maintenance and replacement. In particular, the program will address an increase in underground cable faults incurred during the current period.

These replacement and renewal projects are necessary to ensure that ActewAGL Distribution continues to meet safety obligations under the Management of Electricity Network Assets Code as well as to ensure the reliability and security of supply for standard control services in accordance with the *Electricity Distribution (Supply Standards) Code*.

2.2.2 Customer Initiated expenditure

In developing forecast customer initiated capital expenditure, ActewAGL Distribution takes account of:

- direct customer or developer enquiries;
- major public and private development initiatives identified through public/media announcements;
- future development activity identified through the ACT Government planning, preliminary assessment and agency liaison/consultation processes;
- future development activity identified through discussions with the ACT Government on land release programs;
- investigation and reconciliation with ACT Government land release programs and BIS Shrapnel economic forecasting data; and
- historic expenditure in the various customer initiated work categories, adjusted to reflect the anticipated broader short-term economic environment.

Total customer initiated capital expenditure for the 2009-14 regulatory period was $137 million, or around 35 per cent of total capital expenditure for the period. This expenditure exceeded the AER's decision in the current determination by around $31 million, and was driven by stronger than anticipated growth in commercial and industrial development, as well as urban development associated with ACT Government land releases.

Customer initiated capital expenditure is expected to be lower in the coming regulatory period, but will remain relatively stable, averaging around $24 million per year.

2.2.3 Augmentation

During the current period the new Eastlake zone substation was constructed and the Civic zone substation was augmented to meet urgent capacity requirements associated with redevelopment in surrounding areas. Additionally, Stage 1 of the Southern Supply to ACT project

involved the construction of 132kV lines from the southern bulk supply point to provide the ACT with a second point of supply as required by the Electricity Transmission Regulation 2006.

ActewAGL Distribution's augmentation plan for the 2014-19 regulatory period reflects the organisation's focus on ensuring the network is able to efficiently and reliably meet anticipated customer demand. The augmentation expenditure profile is significantly lower in the first two years of the 2014-19 regulatory period compared to the final years of the current period, before increasing in 2016/17 and 2017/18.

At the date of this transitional proposal, major augmentation projects expected to be undertaken during the 2014-19 regulatory period include:

- A new zone substation[4] in the Molonglo district for the provision of power to new suburbs in Molonglo and North Weston. The new zone substation will be able to take over some load in Weston Creek currently supplied by the Woden zone substation, thereby deferring the need for capacity augmentation at the Woden zone substation.
- Installation of a 3rd 132/11kv transformer at the Belconnen zone substation to meet current and future estimated load requirements, and to maintain ongoing reliability in the Belconnen region by ensuring that n-1 redundancy is maintained at the station.
- Upgrade of the 132kV transmission line between Gilmore and Theodore zone Substation, known as Southern Supply to ACT – Stage 2. This is a network security project aimed at upgrading existing lines to meet a capacity rating required by the Electricity Transmission Regulation 2006.

2.2.4 Reliability and quality improvements

ActewAGL Distribution expects to spend approximately $9 million on reliability and quality improvement initiatives over the 2014-19 regulatory period. The bulk of this expenditure is attributed to the installation of optical ground wires (OPGW) on the 132kV transmission network. This infrastructure will replace existing capacity constrained communication networks with a single network and will provide a number of benefits. Importantly, improved speed, security, reliability and functionality will enable ActewAGL Distribution to comply with fault clearing times specified in the National Electricity Rules (NER) for network performance standards.

2.2.5 Network IT expenditure

During the current period, ActewAGL Distribution embarked on a program of operational technology (OT) investment aimed at refreshing and replacing a number of critical technologies and systems that were nearing capacity or end of useful life. As such, many were unable to support core business capabilities and meet future business needs, regulatory reporting and customer engagement requirements.

[4] Construction of the Molonglo zone substation was originally planned for the 2009-14 period but was deferred due to deferred urban development in the areas to be serviced by this zone substation

The Operational Systems Replacement Program (OSRP) will equip ActewAGL Distribution with a modern network management capability including a new SCADA system, maintenance planning and works management systems. The scale of investment undertaken during the current period is greater than the Network IT capital expenditure allowance forecast at the time of the last regulatory determination, but has been necessary to ensure ActewAGL Distribution is able to maintain current service standards, reduce risk and meet emerging consumer level data and regulatory reporting requirements.

Expenditure on Network IT is forecast to decrease significantly over the 2014-19 as major components of the OSRP are completed by the end of 2013/14. Expenditure in the transitional year will focus on building integrated capability between recently implemented systems, automating key business functions and ensuring compliance with customer engagement requirements. Expenditure during the subsequent period will include the mobility project which is aimed at increasing field force effectiveness and greatly improving the quality and currency of data by capturing information at the source.

2.2.6 Non-system assets expenditure

The primary driver of non-system assets capital expenditure in the 2014-19 regulatory period is the transfer of Network Division's vehicle fleet to finance (capital) leases as existing operating leases expire. This approach is consistent with standard industry treatment of leased vehicles. Finance leases will account for around two thirds of the $32.3 million estimated capital expenditure for non-system assets across the 2014-19 regulatory period.

Non-system assets expenditure also includes facilities capital expenditure, which incorporates the refurbishment of the Fyshwick Depot control room and refurbishment of the Greenway Depot to accommodate an increase in staff numbers associated with major augmentation projects, and following the restructure of the Electricity Networks division. Built in 1990, many of the building's fixtures and furnishings are in need of replacement. The refurbishment will also include the installation of improved electronic security.

2.2.7 Corporate services business support

Corporate services business support capital expenditure comprises information and communication technology (ICT) and property and security costs. A share of corporate capital expenditure is allocated directly to Electricity Networks using ActewAGL Distribution's cost allocation methodology as approved by the AER.

Corporate services business support capital expenditure for the 2009-14 regulatory period was approximately $26 million, exceeding the current determination allowance by around $15 million. This variation was largely driven by the Core System Replacement Program (CSRP) which incorporated the refresh or replacement of key corporate IT systems that had become increasingly ineffective in supporting core business functions, or because they were nearing end of vendor support arrangements. This project was identified as necessary to be undertaken during the current period to reduce risk to the business, enable simplification and integration of systems and for ActewAGL Distribution to meet emerging regulatory reporting and consumer engagement requirements.

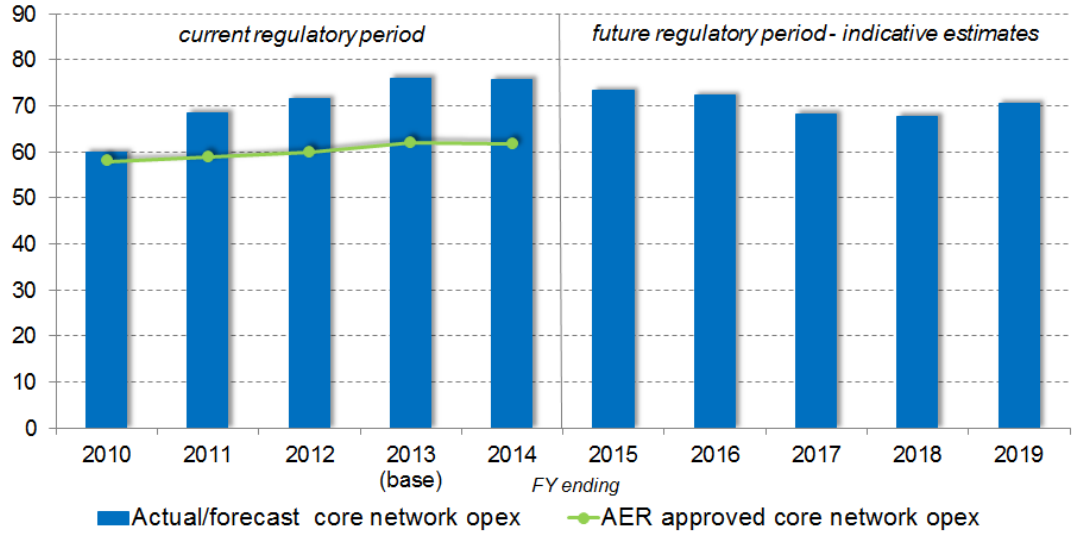
The 2014-19 capital expenditure program includes an estimate of $9.3 million for corporate services business support. Of this, approximately one third will occur in the transitional year comprising Phase 2 of the financial information management system (FIMS) project, and an upgrade of the Fyshwick data centre which is expected to reach capacity by 2015. Expenditure on the data centre will increase capacity and ensure ongoing compliance with the Payment Card Industry Data Security Standard (PCIDSS). Capital expenditure of $2.5 million on business intelligence will commence in 2016/17. This will deliver enhanced data interrogation and reporting capability, enabling ActewAGL Distribution to respond quickly to changing regulatory reporting demands.

3 Operating expenditure – standard control services

The indicative estimate for core network operating expenditure in 2014/15 is $73.5 million for standard control services. This represents a slight decrease of approximately 3.7 per cent on the 2012/13 base year standard control operating expenditure. Expenditure throughout the period is expected to be relatively stable.

Figure 2 below shows actual (and estimated 2013/14) operating expenditure in the current regulatory period, along with indicative estimates for operating expenditure in the next regulatory period.

Figure 2 Core network operating expenditure 2009 – 19 ($million, 2013/14)



3.1 Overview of historical expenditure 2009-14

ActewAGL Distribution expects its total standard control operating expenditure for the current period to exceed that determined by the AER by approximately $39.5 million or 10 per cent over the current period ($2013/14). This is shown in Table 3 below.

Table 3 – Total standard control operating expenditure 2009-14* ($million, 2013/14)

	2009/10	*2010/11*	*2011/12*	*2012/13*	*2013/14*	*Total*
AER allowance	67.4	72.4	77.5	82.8	85.5	385.6
ActewAGL Distribution actual/forecast†	65.9	77.2	88.1	96.3	97.6	425.1
Variance	(1.5)	4.7	10.6	13.5	12.1	39.5

*Includes FiT, excludes ancillary services.

†Actual expenditure for 2009-2013, forecast expenditure for 2013/14

Key drivers of the additional expenditure that were unforseen at the time of the AER's Final Decision in 2009 include:

- A restructure of the Energy Networks Division undertaken in 2011 in response to performance and safety concerns. The restructure, which divided the energy networks functions into two divisions (Asset Management and Network Services) provides greater focus on strategic asset management and performance of work, which is essential to providing an improved safety environment and network reliability over the longer term.
- An organisation wide focus on environment, health and safety issues over the current regulatory period including the establishment of a dedicated Environment, Health, Safety and Quality (EHSQ) Division. Expenditure in this area is higher than anticipated at the time of the last review, but was in part necessitated by changes in the Work Health and Safety (WHS) legislation in 2011.
- A change in the corporate services structure following the sale of two ActewAGL associate companies (TransACT Capital Communications and Ecowise Environmental) and changes to ActewAGL Distribution's contracts management and business development functions led to a greater share of corporate costs being allocated to the remaining ActewAGL divisions, including electricity distribution.
- Higher than forecast expenditure on vegetation management from 2010/11 was necessitated by the breaking of prolonged drought, and included the introduction of helicopter surveillance of vegetation and its proximity to network assets.[5]
- Cost escalators (labour and materials) used by the AER in its current determination were lower than those proposed by ActewAGL Distribution and actual wage growth over the current regulatory period. It is estimated that actual wages growth over the period has been in excess of 10 per cent higher than the escalators applied by the AER.

3.2 Forecast operating expenditure summary 2014-19

ActewAGL Distribution's indicative estimate for core network standard control operating expenditure in 2014/15 is $73.5 million, which is below the 2012/13 base year level for standard control services. Standard control operating expenditure is expected to continue to decrease across the first four years of the 2014-19 regulatory period, with a small increase in 2018/19. Core network standard control operating expenditure for the period is expected to average around $71 million per year.

The (2012/13) base forecast includes a number of unanticipated step changes in operating costs that were incurred during the current regulatory period, and were not included in the AER's regulatory allowance for operating expenditure.

[5] On 1 November 2013, ActewAGL Distribution submitted an application under clause 6.6.1(c) of the Rules for a positive cost pass through arising from a material increase in vegetation management costs in 2012-13. The AER's decision on this application is pending.

Compliance with legislated standards and regulatory reporting requirements is a substantial driver of the costs incurred by ActewAGL Distribution in operating and maintaining its electricity network. A number of regulatory obligations that were introduced during the current period are included in the base year expenditure. Additional regulatory obligations that are likely to be introduced during the 2014-19 regulatory period have been built into operating expenditure forecasts. These are discussed in more detail at a category level below.

Indicative estimates for operating expenditure by category for the 2014-19 regulatory period are provided in Table 4, and expenditure for each category is summarised at a category level below.

Table 4 – Indicative estimates for core network standard control operating expenditure for 2014-19 ($m, $2013/14)

	2014/15	2015/16	2016/17	2017/18	2018/19	Total
Network maintenance costs	23.0	22.3	22.5	22.0	23.1	112.8
Network operating costs	27.7	27.6	26.8	28.3	28.1	138.6
Other expenditures	22.7	22.5	19.2	17.6	19.6	101.7
Total core network operating expenditure	**73.5**	**72.4**	**68.5**	**67.9**	**70.7**	**353.0**

3.2.1 Network maintenance costs

Network maintenance expenditure is largely driven by the mix of assets in service and their condition, which is dependent both on their age and how well they have been maintained. The number of assets needing to be maintained each year increases with customer growth.

Network maintenance includes maintenance carried out on zone substations, secondary systems, distribution and transmission assets and property. It includes planned and unplanned maintenance as well as condition monitoring, maintenance strategy and planning and vegetation management.

ActewAGL Distribution's actual network maintenance operating expenditure exceeded the regulatory allowance in the current period by approximately $17 million. This variation was largely driven by higher than forecast vegetation management costs as a result of above average vegetation regrowth when prolonged drought conditions broke, and a significant increase in underground cable faults during the period. Network maintenance operating expenditure was also impacted by actual wages costs being higher than the escalators set by the AER in 2009, as previously noted.

Standard control network maintenance expenditure in the next regulatory period is forecast to be slightly lower than that of the 2009-14 regulatory period. Expenditure is expected to remain relatively constant across all categories of network maintenance costs over the regulatory period, averaging $22.6 million annually, or $113 million in total for standard control assets for the period.

3.2.2 Network operating costs

Annual network operating costs are expected to average around $28 million per annum for the 2014-19 regulatory period. Network operating costs are those associated with network management, network systems operation and control, network support systems and planning and control. This includes EHSQ costs as well as regulatory and National Electricity Market (NEM) compliance costs.

ActewAGL Distribution's network operating costs in 2014/15 are expected to be significantly higher than the base year expenditure in 2012/13 because additional resources are required to ensure ActewAGL Distribution is able to meet a growing list of regulatory reporting and EHSQ requirements.

In particular, changes to the Work Health and Safety Legislation in 2011 have had a significant impact on ActewAGL Distribution's operating costs in the current period and will continue to impact costs in the 2014-19 regulatory period. To ensure compliance with important safety requirements, ActewAGL established an Environment, Health, Safety and Quality division in 2012 and commenced rewriting its suite of safety policies and procedures. This process has been highly resource intensive and will continue into the next regulatory period.

There has also been a significant increase in the level of regulatory compliance and reporting during the current regulatory period. Notably, the National Energy Customer Framework commenced in the ACT on 1 July 2012, introducing a new set of national laws, rules and regulations governing the sale and distribution of energy to consumers. This framework introduced a number of ongoing reporting and audit requirements, and a commitment to oversee process improvement.[6]

The National Planning and Expansion Framework commenced on 1 January 2013. This was initiated by the Ministerial Council of Energy in 2011, and includes new demand side obligations on DNSPs within the Rules. Obligations include requirements by DNSPs to undertake annual planning reviews, publish annual planning reports, undertake demand side engagement, joint planning with TNSPs, and a new regulatory investment test for distribution.

3.2.3 Other expenditures

Other expenditures comprise costs such as the apprentice training program and a share of corporate service charges that are allocated to the electricity network business via ActewAGL Distribution's approved cost allocation methodology.

ActewAGL Distribution forecasts a decrease of around 19.5 per cent in other expenditure in 2014/15 compared to the base year, and it is anticipated that expenditure will average approximately $20 million per year across the period.

[6] In January 2013, the AER approved a cost pass through for costs associated with NECF implementation in 2012.

This decrease partly reflects a decision by ActewAGL Distribution to reduce its intake of new apprentices based on a recent review of ActewAGL Distribution's program of work, employee turnover and proposed future work requirements.

Attachment C Indicative prices for standard control services

Table C.1 Indicative prices for standard control DUOS services 2014/15 (excluding GST)

Code	*Description*	*Unit*	*Price 2013/14*	*Indicative Price 2014/15*
10	**Residential Basic Network**			
	Network access charge	cents/day	21.440	21.920
	Energy consumption	cents/kWh	5.649	4.863
15	**Residential TOU Network**			
	Network access charge	cents/day	21.440	21.920
	Energy consumption at max times	cents/kWh	9.894	10.82
	Energy consumption at mid times	cents/kWh	5.511	6.172
	Energy consumption at economy times	cents/kWh	4.042	4.023
20	**Residential 5000 Network**			
	Network access charge	cents/day	42.640	43.120
	Energy consumption for the first 60 kWh per day	cents/kWh	4.109	3.410
	Energy consumption above 60 kWh per day	cents/kWh	5.649	4.863
30	**Residential with Heat Pump Network**			
	Network access charge	cents/day	85.340	85.820
	Energy consumption for the first 165 kWh per day	cents/kWh	2.893	2.033
	Energy consumption above 165 kWh per day	cents/kWh	5.649	4.863
40	**General Network**			
	Network access charge	cents/day	42.330	39.770
	Energy consumption for the first 330 kWh per day	cents/kWh	9.097	7.580
	Energy consumption above 330 kWh per day	cents/kWh	12.818	11.292
60	**Off-Peak (1 / 2) Night Network (obsolete)**			
	Energy consumption	cents/kWh	0.085	0.097
70	**Off-Peak (3) Day & Night Network**			
	Energy consumption	cents/kWh	0.204	0.201
80	**Streetlighting Network**			
	Network access charge	cents/day	43.000	40.000
	Energy consumption	cents/kWh	6.126	6.823
90	**General TOU Network**			
	Network access charge	cents/day	42.330	39.770
	Energy consumption at business times	cents/kWh	17.134	17.517
	Energy consumption at evening times	cents/kWh	8.532	7.834
	Energy consumption at off-peak times	cents/kWh	3.478	3.801

Code	Description	Unit	Price 2013/14	Indicative Price 2014/15
101	**LV TOU kVA Demand Network**			
	Network access charge per connection point	cents/day	49.000	48.500
	Maximum demand charge	c/KVA/day	39.021	36.642
	Energy consumption at business times	cents/kWh	4.733	3.174
	Energy consumption at evening times	cents/kWh	2.798	2.351
	Energy consumption at off-peak times	cents/kWh	1.045	1.106
103	**LV TOU Capacity Network**			
	Network access charge per connection point	cents/day	49.000	48.500
	Maximum demand charge	c/KVA/day	18.082	19.200
	Capacity charge	c/KVA/day	18.082	19.200
	Energy consumption at business times	cents/kWh	4.733	6.338
	Energy consumption at evening times	cents/kWh	2.798	3.520
	Energy consumption at off-peak times	cents/kWh	1.143	1.165
111	**HV TOU Demand Network**			
	Network access charge per connection point	$/day	17.000	18.000
	Maximum demand charge	c/KVA/day	14.915	12.649
	Capacity charge	c/KVA/day	14.492	12.649
	Energy consumption at business times	cents/kWh	3.583	1.998
	Energy consumption at evening times	cents/kWh	2.141	1.224
	Energy consumption at off-peak times	cents/kWh	0.790	1.108
112	**HV TOU Demand Network – Customer HV**			
	Network access charge per connection point	$/day	17.000	18.000
	Maximum demand charge	c/KVA/day	13.915	11.749
	Capacity charge	c/KVA/day	13.492	11.749
	Energy consumption at business times	cents/kWh	3.583	1.998
	Energy consumption at evening times	cents/kWh	2.141	1.224
	Energy consumption at off-peak times	cents/kWh	0.790	1.108
121	**HV TOU Demand Network – Customer LV**			
	Network access charge per connection point	$/day	17.000	18.000
	Maximum demand charge	c/KVA/day	14.915	12.649
	Capacity charge	c/KVA/day	14.915	12.649
	Energy consumption at business times	cents/kWh	3.303	1.604
	Energy consumption at evening times	cents/kWh	1.791	0.891
	Energy consumption at off-peak times	cents/kWh	0.650	0.346

Code	Description	Unit	Price 2013/14	Indicative Price 2014/15
122	**HV TOU Demand Network – Customer HV and LV**			
	Network access charge per connection point	$/day	17.000	18.000
	Maximum demand charge	c/KVA/day	13.915	11.749
	Capacity charge	c/KVA/day	13.915	11.749
	Energy consumption at business times	cents/kWh	3.303	1.604
	Energy consumption at evening times	cents/kWh	1.791	0.891
	Energy consumption at off-peak times	cents/kWh	0.650	0.346
135	**Small Unmetered Loads Network**			
	Network access charge	cents/day	35.800	28.000
	Energy consumption	cents/kWh	10.738	10.886
	Renewable Energy Generation			
	Energy consumption	cents/kWh	-5.649	-4.863

Attachment D Transmission Pricing Methodology

Attachment D to Transitional Regulatory Proposal 2014/15

Proposed Pricing Methodology: Transmission Standard Control Services provided by Dual Function Assets

2014-15 transitional regulatory control period

January 2014

Contents

1 Purpose and scope

This Pricing Methodology applies to ActewAGL Distribution's transmission standard control service revenue derived in respect of the transmission standard control services provided by ActewAGL Distribution's dual function assets for the transitional regulatory control period.[1] It is provided with ActewAGL Distribution's transitional regulatory proposal for the transitional regulatory control period in accordance with clause 6.26(c) of transitional Chapter 6 of the National Electricity Rules (**Rules**)[2], in anticipation of a determination by the Australian Energy Regulator (**AER**) under clause 6.25(b) of transitional Chapter 6 in its forthcoming Stage 2 Framework and Approach Paper for the subsequent regulatory control period that pricing in respect of these services should be regulated under Part J of Chapter 6A through the application of clause 6.26 of transitional Chapter 6.[3]

ActewAGL Distribution is deemed under the Rules to be a transmission network service provider (**TNSP**) because it operates dual function assets and those assets are deemed to be transmission network assets which provide prescribed transmission services.[4] All references to prescribed transmission services in this Pricing Methodology are references to the services provided by ActewAGL Distribution's dual function assets.

ActewAGL Distribution does not directly supply services to transmission network users. That is, there are no transmission customers or generator's generating units directly connected to ActewAGL Distribution's dual function assets. Further, ActewAGL Distribution anticipates that this will remain the case throughout the transitional regulatory control period. It follows that ActewAGL Distribution's dual function assets will not provide any prescribed entry services or prescribed exit services during the transitional regulatory control period, nor will ActewAGL Distribution directly impose any transmission service charges in that period. For this reason, this Pricing Methodology relates only to prescribed common transmission services and prescribed

[1] All terms used in this Pricing Methodology that are defined in Chapter 10 or clause 11.55.1 of the National Electricity Rules are intended to take that defined meaning.

[2] Transitional Chapter 6 means current Chapter 6 as modified in accordance with clause 11.55.2 of the Rules (clause 11.55.1 definition of 'transitional Chapter 6' and clause 11.55.2). Current Chapter 6 is Chapter 6 of the Rules as in force immediately after Schedules 1 and 3 of the *National Electricity (Economic Regulation of Network Service Providers) Rule 2012* came into force (clause 11.55.1 definitions of 'current Chapter 6' and 'Amending Rules'). Schedules 1 and 3 of the *National Electricity (Economic Regulation of Network Service Providers) Rule 2012* came into force on 29 November 2012. Version 53 of the Rules contains the Rules as in force in the period 29 November 2012 to 31 December 2012 and, thus, current Chapter 6.

[3] The AER has indicated that its Stage 2 Framework and Approach Paper for the subsequent regulatory control period to be published by the end of January 2014 will include its determination that Part J of Chapter 6A, transmission pricing, will apply to ActewAGL's dual function assets.

[4] Clause 6.26(d)(1) of transitional Chapter 6.

TUOS services and provides for the pricing of those services to be determined and applied by TransGrid in accordance with its pricing methodology applying in the transitional regulatory control period.

ActewAGL Distribution has prepared this Pricing Methodology in accordance with the requirements in chapters 6 and 6A of the Rules[5] and the AER's "Electricity transmission network service providers Pricing methodology guidelines October 2007" (**Guidelines**), in so far as those requirements relate to ActewAGL Distribution's dual function assets. This Pricing Methodology gives effect to, and is consistent with the Pricing Principles for Prescribed Transmission Services set out in clause 6A.23 of the Rules.

This Pricing Methodology applies in respect of the transitional regulatory control period, being the period 1 July 2014 to 30 June 2015.

Transitional Chapter 6 applies in respect of this Pricing Methodology as there are transitional arrangements under Chapter 11 of the Rules that govern the process for New South Wales and ACT distribution network service providers whose current regulatory control period ends on 1 July 2014. Chapter 11 sets out the requirements for securing a transitional regulatory determination for the transitional regulatory control period.

Where relevant, this Pricing Methodology refers to and relies upon TransGrid's pricing methodology that the AER determines will apply to TransGrid for the 1 July 2014 to 30 June 2015 (**TransGrid's Pricing Methodology**). As TransGrid's Pricing Methodology for the period 1 July 2014 to 30 June 2015 is yet to be approved, all references in this Pricing Methodology are to TransGrid's pricing methodology dated April 2010 being the methodology that the AER has determined will apply to TransGrid for the regulatory control period from 1 July 2009 to 30 June 2014 (**TransGrid's Current Pricing Methodology**). Once TransGrid's Pricing Methodology is approved by the AER, the references to TransGrid's Current Pricing Methodology in this Pricing Methodology should be read as referring to the analogous sections of TransGrid's Pricing Methodology.

2 Transmission Network Service Providers in the New South Wales region of the National Electricity Market

ActewAGL Distribution provides prescribed transmission services within the New South Wales region of the National Electricity Market (**NEM**) which includes the Australian Capital Territory.

[5] Being transitional Chapter 6 and Chapter 6A in the current version of the Rules, version 60, that commenced 1 January 2014.

There are multiple TNSPs of prescribed transmission services within the New South Wales region of the NEM (**NSW Region**). ActewAGL Distribution is an appointing provider for the purposes of clause 6A.29.1(a) of the Rules. ActewAGL Distribution nominates TransGrid as the co-ordinating network service provider for the NSW Region in accordance with clause 6A.29.1(a) of the Rules.

From 1 July 2014, TransGrid will collect the prescribed transmission standard control services revenue entitlements for ActewAGL Distribution.

The parts of this Pricing Methodology which will be dealt with by TransGrid as co-ordinating network service provider for the NSW Region in accordance with TransGrid's Pricing Methodology are those parts which provide for:

- the allocation of the aggregate annual revenue requirement (**AARR**) for prescribed transmission services provided by ActewAGL Distribution in the NSW Region to categories of prescribed transmission services;
- the allocation of that AARR to transmission network connection points of transmission network users located within the NSW Region; and
- the determination of the pricing structure and prices for prescribed common transmission services and prescribed TUOS services applicable in respect of those transmission network connection points.6

ActewAGL Distribution will advise TransGrid annually of the AARR for its dual function assets.[7] ActewAGL Distribution will also provide any other information reasonably required by TransGrid to ensure the proper calculation of prescribed transmission prices in the NSW Region.[8]

3 Derivation of the Aggregate Annual Revenue Requirement

For the prescribed transmission services provided by ActewAGL Distribution, the AARR is the transmission standard control service revenue adjusted:

- in accordance with clauses 6.6 and 6.13; and
- by subtracting the operating and maintenance costs expected to be incurred in the provision of prescribed common transmission services.[9]

[6] Clauses 6A.29.1(d) and 6A.24.1(b).

[7] In accordance with clause 6A.29.1(b).

[8] In accordance with clause 6A.29.1(e).

[9] Clause 6A.22.1 as modified by the operation of clause 6.26(d).

The operating and maintenance costs expected to be incurred in the provision of prescribed common transmission services are determined from budget projections and include:

- maintenance of transmission line and components of zone substations;
- network switching and operations;
- administration and management of the business;
- network planning and development; and
- general overheads.

The operating and maintenance costs expected to be incurred in the provision of prescribed common transmission services will be recovered via TransGrid's transmission prices in accordance with clause 6A.23.4.

The attributable cost shares for each category of prescribed transmission service will be calculated in accordance with clause 6A.22.3 of the Rules subject to any adjustment required under the principles in clause 6A.23.2, to substantially reflect the ratio of:

(1) the costs of the dual function assets directly attributable to the provision of that category of prescribed transmission services; to

(2) the total costs of all ActewAGL Distribution's dual function assets directly attributable to the provision of prescribed transmission services.

The costs of these dual function assets as referred to in clause 6A.22.3(a) of the Rules will be calculated as the optimised replacement cost (**ORC**).

Part 2.4 of the Guidelines will be applied in respect of the attribution of ActewAGL Distribution's dual function assets to each category of prescribed transmission services.

Hypothetical Example:

If the ORCs of the dual function assets have been allocated to the applicable categories of prescribed transmission services as shown in Table 1 below then the attributable costs shares are calculated as:

$$\text{Attributable cost share}_{TUOS} = ORC_{Tuos} / ORC_{TOTAL}$$

$$= \$33,566,667 / \$34,316,667$$

$$= 0.978$$

with the attributable cost shares of the other categories calculated in the same manner, as shown in Table 2.

Table 1: Costs allocated to categories of prescribed transmission services

Category	ORC
TUOS service	33,566,667
Common Service	750,000
Total	34,316,667

Table 2: Attributable cost shares

Category	ORC	Attributable cost share
TUOS service	33,566,667	0.978
Common Service	750,000	0.022
Total	34,316,667	1.000

The priority ordering approach outlined in clause 6A.23.2(d) of the Rules will be applied by ActewAGL Distribution. ActewAGL Distribution will adopt TransGrid's Priority Ordering Methodology (see Appendix C of TransGrid's Current Pricing Methodology). A hypothetical worked example is set out in that document.

4 Calculation of the Annual Service Revenue Requirement

The AARR will be allocated to each category of prescribed transmission services in accordance with the attributable cost share resulting in the annual service revenue requirement (**ASRR**) for each category of prescribed transmission service.

The locational and pre-adjusted non-locational shares of prescribed TUOS services will be allocated by TransGrid in accordance with 6A.23.3(d) of the Rules. The locational and adjusted non-locational components of prescribed TUOS services will be determined and allocated to connection points by TransGrid in accordance with clause 6A.23.3(c) of the Rules. Further information is available in TransGrid's Pricing Methodology (see paragraph 6.8.3 of TransGrid's Current Pricing Methodology).

The pricing structure for the recovery of the locational component of prescribed TUOS services is determined by TransGrid in accordance with the Guidelines and clauses 6A.23.4(e)-(i) of the Rules. Further information is available in TransGrid's Pricing Methodology (see paragraph 6.9.2 of TransGrid's Current Pricing Methodology).

How TransGrid intends to set the prescribed TUOS service locational price at new connection points or at connection points where the load has changed significantly after prescribed TUOS

service locational prices have been determined and published by TransGrid is explained in TransGrid's Pricing Methodology (see paragraph 6 of TransGrid's Current Pricing Methodology).

The postage stamp pricing structure for the recovery of the adjusted non locational component of prescribed TUOS services is determined by TransGrid in accordance with the Guidelines and clause 6A.23.4(j) of the Rules. Further information is available in TransGrid's Pricing Methodology (see paragraph 6.9.3 of TransGrid's Current Pricing Methodology).

The postage stamp pricing structure for the recovery of prescribed common transmission services is determined by TransGrid in accordance with the Guidelines and clause 6A.23.4(d) of the Rules. Further information is available in TransGrid's Pricing Methodology (see paragraph 6.10 of TransGrid's Current Pricing Methodology).

The likely circumstances surrounding the use of current energy off take or current maximum demand off take in its proposed pricing methodology is explained in TransGrid's Pricing Methodology (see paragraph 6.11 of TransGrid's Current Pricing Methodology).

5 Other Information

This pricing methodology and TransGrid's Pricing Methodology[10] give effect to, and are consistent with, the pricing principles for prescribed transmission services.

Separate prices will be developed for each category of prescribed transmission service by TransGrid.

For the reasons explained at the outset, ActewAGL Distribution will not bill any transmission network users for prescribed transmission services in the transitional regulatory control period. Consistent with clause 6A.27.4 of the Rules, TransGrid, as co-ordinating network service provider for the NSW Region, will pay to ActewAGL Distribution the revenue which is estimated to be collected during the transitional regulatory control period by it as charges for prescribed transmission services for the use of ActewAGL Distribution's dual function assets. The details of the billing arrangements with transmission network users and transfers between TNSPs conducted in accordance with rule 6A.27 of the Rules is explained in TransGrid's Pricing Methodology (see paragraph 7 of TransGrid's Current Pricing Methodology).

Details of the nature of prudential requirements as outlined in rule 6A.28 of the Rules and how any capital contributions will be taken into account in determining a Transmission Network Users' prices for prescribed transmission services is explained in TransGrid's Pricing Methodology (see paragraph 8 of TransGrid's Current Pricing Methodology).

[10] See paragraph 9 of TransGrid's Current Pricing Methodology.

ActewAGL Distribution did not have any pricing methodology for the purposes of Part E of Chapter 6A of the Rules in the current regulatory control period, as it did not have any assets with the attributes of dual function assets at the time of the making of the distribution determination for that period. ActewAGL Distribution does not consider any transitional arrangements are necessary as a result of the implementation of this Pricing Methodology.

As a regulated business ActewAGL Distribution is required to maintain extensive compliance monitoring and reporting systems to ensure compliance with the National Electricity Law, and the Rules, together with numerous other legislative obligations.

ActewAGL Distribution intends to monitor, and develop records of its compliance with its approved pricing methodology, the pricing principles for prescribed transmission services and more broadly part J of the Rules and:

- Maintain the specific obligations arising from part J of the Rules in its compliance management system;
- Maintain electronic records of the annual calculation of the AARR and supporting information; and
- Periodically subject its processes to functional audit by suitably qualified persons.

Attachment E Indicative prices for metering services

Table E.1 provides indicative prices payable to ActewAGL Distribution for alternative control metering services. [75]

Table E.1 Indicative prices for alternative control metering services 2014/15

Code	*Description*	*Unit*	*Price 2013/14*	*Price 2014/15*
MP1	**Quarterly basic metering rate** Accumulation and time-of-use meters read quarterly	cents per day per NMI	12.96	13.28
MP2	**Monthly basic metering rate** Accumulation and time-of-use meters read monthly	cents per day per NMI	22.67	23.23
MP3	**Time-of-use metering rate** Time-of-use meters read monthly	cents per day per NMI	22.67	23.23
MP4	**Monthly manually-read interval metering rate** Interval meters recording at either 15- or 30-minute intervals, read manually and processed monthly	$ per day per NMI	$1.83	1.875
MP6	**Quarterly manually-read interval metering rate** Interval meters recording at either 15- or 30-minute intervals, read manually and processed quarterly	cents per day per NMI	52.20	53.48

[75] Meter reconfiguration, Meter investigation, and Special/additional meter read services classified as alternative control metering services and subject to fixed charges are included in the relevant tables in Attachment F to this transitional proposal.

Attachment F Indicative prices for ancillary network services 2014/15

The charges in Table F.1 are proposed from 1 July 2014 and are payable to ActewAGL Distribution for ancillary services associated with use of the network.[76] These charges apply to work on standard residential and similar installations carried out in normal business hours, unless otherwise stated. Charges for work beyond those specified below, of greater complexity or outside these hours will be determined individually.

After hours charges, where applicable, apply to services performed outside normal business hours. This applies to all services requested after 1400 hours (2:00pm) on working weekdays where the services are to be performed prior to normal business hours on the next working weekday.

Normal business hours are 0800 (8.00 am) to 1600 hours (4.00pm) on working weekdays. *After hours* refers to all other times

Prices include Goods and Services Tax of 10 per cent where stated.

Table F.1 Schedule of charges for ancillary services 2014-15

Code	*Service*	*Service Description / Scope*	*Price*	
			GST Exclusive	*GST Inclusive*
Premise Re-energisation – Existing Network Connection				
501	Re-energise premise – Business Hours	Re-energisation of a premise that is already connected to the network during business hours	$55.86	$61.45
502	Re-energise premise – After Hours	Re-energisation of a premise that is already connected to the network during after-hours periods	$120.18	$132.20
Premise De-energisation – Existing Network Connection				
503	De-energise premise – Business Hours	De-energisation of a premise that is already connected to the network during business hours; excluding where the de-energisation is for debt non-payment	$49.36	$54.30
505	De-energise premise for debt non-payment	De-energisation of a premise that is already connected to the network where the de-energisation is for debt non-payment – Anytime	$93.18	$102.50
Meter Reconfiguration				
507	Install Interval Meter	Installation of an interval meter (Type 5) on customer request during business hours	$66.23	$72.85

[76] The tables in this Attachment F include Meter reconfiguration, Meter investigation, and Special/additional meter read services classified as alternative control metering services and subject to a fixed charge.

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
509	Install / Replace Meter – Micro Renewable Energy Installation	Installation of additional Type 6 meter or replacement of existing Type 6 meter during business hours to facilitate connection of a Micro Renewable Energy Installation	$66.23	$72.85
Meter Investigations				
504	Meter Test (Whole Current) – Business Hours	Meter test for whole current Type 5 – 7 meters only during business hours Fee is refunded if the meter is proven to be faulty	$68.91	$75.80
510	Meter Test (CT/VT) – Business Hours	Meter test for meters utilising a CT or VT during business hours Fee is refunded if the meter installation is proven to be faulty	$350.00	$385.00
Special / Additional Meter Reads				
506	Special Meter Read	Out of cycle meter read during business hours Use for the following: • Customer Initiated Check Read, • Data validation initiated Check Read - prior to billing, • Data validation Check Read - post billing • Customer initiated additional out-of cycle read for billing purposes • Final read Fee associated with a Check Read is refunded if the original reading is proven to be incorrect	$35.41	$38.95
Temporary Network Connections				
520	Temporary Builders' Supply – Overhead (Business Hours)	Installation of a new temporary overhead supply connection including associated metering during business hours; where the service connection complies with the following: • Load is <= 100 Amps/Phase • Single or multi-phase • Meter location <= 25m from source network pole • Point of Attachment/Builders Pole supplied and installed by the customer Includes situations where the service connection point of attachment (POA) and meter are in the permanent location	$396.73	$436.40
522	Temporary Builders' Supply – Underground (Business Hours)	Installation of a new temporary underground supply connection including associated metering during business hours; where the service connection complies with the following: • Load is <= 100 Amps/Phase • Single or multi-phase • Meter location <= 15m from source network pole / pillar / pit / cable end • Conduit between meter location and network connection point supplied and installed by the customer Includes situations where the service connection point of entry (POE) and/or meter are in the permanent location	$700.00	$770.00

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
New Network Connections				
523	New Underground Service Connection – Greenfield	Installation of a new underground service connection, including associated metering, during business hours where the service connection complies with the following: • Service connection is the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Network connection point is located in the street frontage verge • Cable length within block <= 15m • Conduit between the POE/meter location (as applicable) and the property boundary is supplied and installed by the customer • Complete service connection including associated metering can be undertaken in a single visit	No Charge	No Charge
524	New Underground Service Connection – Greenfield Cable Only	Installation of the ***cable component only*** of a new underground service connection, at the customer's specific request, during business hours where the service connection complies with the following: • Service connection is the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Network connection point is located in the street frontage verge • Cable length within block <= 15m • Conduit between the POE/meter location (as applicable) and the property boundary is supplied and installed by the customer Use where the customer requires the cable installed for site logistical reasons and is not ready for the metering and final supply connection Customer will be required to submit a new and separate request for the subsequent installation of the metering and final supply connection when the site is ready.	$446.00	$490.60
525	New Underground Service Connection – Greenfield Metering Only	Installation of the ***metering component only*** of a new underground service connection, at the customer's specific request, during business hours where the service connection complies with the following: • Service connection is the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • The underground cable has already been installed through a previous customer application under Item 524 New Underground Service Connection – Greenfield Cable Only Use where the customer has previously requested a New Underground Service Connection – Greenfield Cable Only for site logistical reasons and now requires the metering and final supply connection	No Charge	No Charge

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
526	New Overhead Service Connection – Brownfield (Business Hours)	Installation of a new overhead service connection, including associated metering, during business hours; where the service connection complies with the following: • Service connection is not the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Service connection is continuous with a length <= 2 spans &/or 25m from source network pole Typically use in redevelopment scenario only where an underground service connection cannot be achieved.	$286.82	$315.50
527	New Underground Service Connection – Brownfield from Front	Installation of an underground service connection, including associated metering, during business hours where the service connection complies with the following: • Service connection is not the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Service connection is continuous with a length <= 25m from network connection point • Network connection point is a pole, pillar or pit located in the street frontage verge • Conduit between the POE/meter location (as applicable) and the network connection point or property boundary is supplied and installed by the customer Where the service connection extends outside the customer property and ActewAGL Distribution is required to undertake additional civil works, additional fees may be applied for the work beyond the scope of this item. Typically use in redevelopment scenarios such as knockdown/rebuilds and/or dual occupancy premises.	$688.18	$757.00
528	New Underground Service Connection – Brownfield from Rear	Installation of an underground service connection, including associated metering, during business hours where the service connection complies with the following: • Service connection is not the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Service connection is continuous with a length <= 25m from network connection point • Network connection point is a pole located in the section backspine • Conduit between the POE/meter location (as applicable) and the network connection point or property boundary is supplied and installed by the customer Where the service connection extends outside the customer property and ActewAGL Distribution is required to undertake additional civil works, additional fees may be applied for the work beyond the scope of this item. Typically use in redevelopment scenarios such as knockdown/rebuilds and/or dual occupancy premises.	$688.18	$757.00

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
Network Connection Alterations and Additions				
541	Overhead Service Relocation – Single Visit (Business Hours)	Relocation of an overhead service connection in a single site visit during business hours where the service connection complies with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Service connection is no more than two spans &/or 25m in length Scope involves: • De-energisation, physical disconnection / dismantling then re-attachment, connection and re-energisation • Replacement of overhead service cable if required	$286.82	$315.50
542	Overhead Service Relocation – Two Visits (Business Hours)	Relocation of an overhead service connection in two site visits during business hours where the service connection complies with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Service connection is no more than two spans &/or 25m in length Scope involves: • De-energisation, physical disconnection / dismantling in first site visit • Re-attachment, connection and re-energisation in second visit • Replacement of overhead service cable if required	$573.64	$631.00
543	Overhead Service Upgrade – Service Cable Replacement Not Required	Upgrade of an existing overhead service connection from single to multi-phase where the installed cable does not require replacement and the service connection complies with the following: • Load <= 100 Amps/Phase • Existing cable is physically able to be connected multi-phase without joints	$369.73	$406.70
544	Overhead Service Upgrade – Service Cable Replacement Required	Upgrade of an existing overhead service connection where the installed cable does not meet the increased load requirements (multi-phase or capacity/rating) and the service connection complies with the following: • Load <= 100 Amps/Phase • Service connection is no more than two spans &/or 25m in length Use for single to multi-phase and capacity upgrades	$688.18	$757.00
545	Underground Service Upgrade – Service Cable Replacement Not Required	Upgrade of an existing underground service connection from single to multi-phase where the installed cable does not require replacement and the service connection complies with the following: • Load <= 100 Amps/Phase • Existing cable is physically able to be connected multi-phase without joints	$369.73	$406.70

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
546	Underground Service Upgrade – Service Cable Replacement Required	Upgrade of an existing underground service connection where the existing cable does not meet the increased load requirements (multi-phase or capacity/rating) and the service connection complies with the following: • Load <= 100 Amps/Phase • Service connection is no more than 25m in length • Conduit between the meter location and the network connection point or property boundary is supplied and installed by the customer Where the service connection extends outside the customer property and ActewAGL Distribution is required to undertake additional civil works, additional fees may be applied for the work outside the scope of this item.	$688.18	$757.00
547	Underground Service Relocation – Single Visit (Business Hours)	Relocation of an underground service connection, or part thereof, in a single site visit during business hours where the service connection complies with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Service connection is no more than 25m in length Scope involves: • De-energisation, physical disconnection/cutting away, installation of new service cable section, jointing and then termination, connection and re-energisation Where the service connection extends outside the customer property and ActewAGL Distribution is required to undertake additional civil works, additional fees may be applied for the work outside the scope of this item.	$688.18	$757.00
548	Install surface mounted point of entry (POE) box	Installation of a surface mounted point of entry box and conduit to ground level on the customer's structure to facilitate installation of a new or relocated underground service connection; where the service connection complies with the following: • Load <= 100 Amps/Phase • Single or multi-phase Scope involves: • Supply and installation of POE box, conduit and associated fixings Applicable where a recessed POE box cannot be provided by the customer Only use in conjunction with Item 526 New Underground Service – Brownfield and Item 547 Underground Service Relocation	$456.00	$501.60
Temporary De-energisation				
560	Temporary de-energisation – LV (Business Hours)	Temporary de-energisation and re-energisation of LV network infrastructure in business hours to allow safe customer / contractor approach and work in close proximity Scope does not include dismantling of lines or network infrastructure Use for tree pruning, mobile plant operation, oversize loads, construction activities	$460.09	$506.10

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
561	Temporary de-energisation – HV (Business Hours)	Temporary de-energisation and re-energisation of HV network infrastructure in business hours to allow safe customer / contractor approach and work in close proximity Scope does not include dismantling of lines or network infrastructure Use for tree pruning, mobile plant operation, oversize loads, construction activities	$460.09	$506.10
Supply Abolishment / Removal				
562	Supply Abolishment / Removal – Overhead (Business Hours)	Decommissioning and removal of an overhead service connection and associated metering during business hours for service connections that comply with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Service connection is no more than two spans &/or 25m in length • Removal of the service connection does not result in a consequential requirement to remove a network pole Use where a property is to be demolished, supply is no longer required, an alternative connection point is to be established / used, or a redundant supply is to be removed.	$286.82	$315.50
563	Supply Abolishment / Removal - Underground (Business Hours)	Decommissioning and removal of an underground service connection and associated metering during business hours for service connections which comply with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Removal of the service connection does not result in a consequential requirement to remove redundant network mains infrastructure such as a pole, pillar, pit Use where a property is to be demolished, supply is no longer required, an alternative connection point is to be established / used, or a redundant supply is to be removed.	$286.82	$315.50
Miscellaneous Customer Initiated Services				
564	Install & Remove Tiger Tails – Establishment (Business Hours)	Installation and removal of "Tiger Tail" covers on overhead lines including service lines, LV & HV during business hours – Establishment fee per site Use in conjunction with Item 565 to determine total service charge	$1085.00	$1193.50
565	Install & Remove Tiger Tails - Per Span (Business Hours)	Installation and removal of "Tiger Tail" covers on overhead lines including service lines, LV & HV during business hours – Length based fee Use in conjunction with Item 564 to determine total service charge	$560.00	$616.00
566	Install & Remove Warning Flags – Installation (Business Hours)	Installation and removal of Warning Flags on overhead lines including service lines, LV & HV during business hours – Establishment fee per site Use in conjunction with Item 567 to determine total service charge	$745.00	$819.50

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
567	Install & Remove Tiger Tails - Per Span (Business Hours)	Installation and removal of Warning Flags on overhead lines including service lines, LV & HV – Lengths based fee Use in conjunction with Item 566 to determine total service charge	$480.00	$528.00
Embedded Generation - Operational & Maintenance Fees				
568	Small Embedded Generation OPEX Fees - Connection Assets	Annual operational and maintenance charges for the dedicated connections assets of small embedded generators (other than residential)	2% of value of connection assets per annum	
569	Small Embedded Generation OPEX Fees - Shared Network Asset	Annual operational and maintenance charges for the shared network assets associated with small embedded generators (other than residential)	2% of value of shared assets allocated to the generator per annum (if applicable)	
Connection Enquiry Processing - PV Installations*				
570	PV Connection Enquiry – LV Class 1 (<= 10kW Single Phase / 30kW Three Phase)	Receipt, registration, processing and responding to a connection enquiry for an LV network connection of a Class 1 PV installation with a nameplate rating <= 10kW single phase / 30kW three phase	No charge	No charge
571	PV Connection Enquiry – LV Class 2 to 5 (> 30kW <= 1500kW Three Phase	Receipt, registration, processing and responding to a connection enquiry for an LV network connection of a Class 2 - 5 PV installation with a nameplate rating > 30kW single phase and <= 1500kW three phase	$511.82	$563.00
572	PV Connection Enquiry – HV	Receipt, registration, processing and responding to a connection enquiry for a HV network connection of a PV installation of any size	$1,024.55	$1,127.00
573	Provision of Data for Network technical study for large scale installations	The provision of network data and an analysis of the results of the study. Initial payment before work proceeds.	$11,525.45	$12,678.00
Network Design & Investigation / Analysis Services - PV Installations†				
574	Design & Investigation - LV Connection Class 1 PV (<= 10kW Single Phase / 30kW Three Phase)	Network design & investigation / analysis services for an LV network connection of a Class 1 PV installation with a nameplate rating <= 10kW single phase / 30kW three phase.	No charge	No charge

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
575	Design & Investigation - LV Connection Class 2 PV (> 30kW and <= 60kW Three Phase)	Network design & investigation / analysis services for an LV network connection of a Class 2 PV installation with a nameplate rating > 30kW and <= 60kW three phase.	$3,688.18	$4,057.00
576	Design & Investigation - LV Connection Class 3 PV (> 60 kW and <= 120kW Three Phase)	Network design & investigation / analysis services for an LV network connection of a Class 3 PV installations with a nameplate rating > 60kW and <= 120kW three phase.	$4,815.45	$5,297.00
577	Design & Investigation - LV Connection Class 4 PV (> 120 kW and <= 200kW Three Phase)	Network design & investigation / analysis services for an LV network connection of a Class 4 PV installation with a nameplate rating > 120kW and <= 200kW three phase.	$7,889.09	$8,678.00
578	Design & Investigation - LV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – ActewAGL Network Study	Network design & investigation / analysis services for an LV network connection of a Class 5 PV installation with a nameplate rating > 200kW and <= 1500kW three phase where ActewAGL Distribution undertakes the network study.	$10,682.73	$11,751.00
579	Design & Investigation - HV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – Customer Network Study	Network design & investigation / analysis services for an HV network connection of a Class 5 PV installation with a nameplate rating > 200kW and <= 1500kW three phase where ActewAGL Distribution provides the requisite network data and the customer undertakes the network study.	$11,506.36	$12,657.00
Rescheduled Site Visits				
590	Rescheduled Site Visit – One Person	Wasted site visit for a one person team where the service was not able to be completed on attendance. Includes customer cancellations before the work is completed, Officer unable to access site to complete service on arrival, site not ready for service requested on arrival, site unsafe &/or installation defect prevents service being undertaken or completed including non-compliance with ActewAGL Distribution Standards and/or Service & installation Rules	$125.00	$137.50

Code	Service	Service Description / Scope	Price	
			GST Exclusive	GST Inclusive
591	Rescheduled Site Visit – Service Team	Wasted site visit for a Services Team where the service was not able to be completed on attendance. Includes customer cancellations before the work is completed, Team unable to access site to complete service on arrival, site not ready for service requested on arrival, site unsafe &/or installation defect prevents service being undertaken or completed including non-compliance with ActewAGL Distribution Standards and/or Service & installation Rules	$375.00	$412.50

* See: http://www.actewagl.com.au/~/media/ActewAGL/ActewAGL-Files/Products-and-services/Building-and-renovation/For-professionals/CCA0212-48%20guidelines-NoContacts.ashx

† See: http://www.actewagl.com.au/~/media/ActewAGL/ActewAGL-Files/About-us/Publications/Guidelines-for-LV-embedded-generator-connections.ashx

Table F.2 New ancillary network services – basis for charges

Code	*Service*	*Service Description / Scope*
Meter Investigations		
510	Meter Test (CT/VT) – Business Hours	New published charge recovering the cost of performing the test.
New Network Connections		
523	New Underground Service Connection – Greenfield	Current practice made explicit in schedule.
524	New Underground Service Connection – Greenfield Cable Only	New charge intended to discourage what is usually a free service if performed in one visit. Where it is necessary, this charge recovers the cost of a team performing the task.
525	New Underground Service Connection – Greenfield Metering Only	Free service completing the work performed in item 524.
526	New Overhead Service Connection – Brownfield (Business Hours)	Previously covered in item 530 in the approved 2013/14 pricing schedule. Charge increased by CPI.
527	New Underground Service Connection – Brownfield from Front	Previously covered in item 531 in the approved 2013/14 pricing schedule. Charge increased by CPI.
528	New Underground Service Connection – Brownfield from Rear	Previously covered in item 531 in the approved 2013/14 pricing schedule. Charge increased by CPI.
Network Connection Alterations and Additions		
541	Overhead Service Relocation – Single Visit (Business Hours)	Previously covered in item 530 in the approved 2013/14 pricing schedule. Charge increased by CPI.
542	Overhead Service Relocation – Two Visits (Business Hours)	Calculated as two applications of item 530 in the approved 2013/14 pricing schedule. Charge increased by CPI.
543	Overhead Service Upgrade – Service Cable Replacement Not Required	Covered in item 532 in the approved 2013/14 pricing schedule. Extended to apply to all service upgrades, including where the load justifies upgrade because the exemption provided an incentive for applicants to overstate the load. Charge increased by CPI.
544	Overhead Service Upgrade – Service Cable Replacement Required	New item. Applies the same charge as for underground where the cable needs to be replaced (previously item 534 now item 546). Charge increased by CPI.

Code	Service	Service Description / Scope
545	Underground Service Upgrade – Service Cable Replacement Not Required	Replaces item 533 in the approved 2013/14 pricing schedule. Charge increased by CPI.
546	Underground Service Upgrade – Service Cable Replacement Required	Replaces item 534 in the approved 2013/14 pricing schedule. Charge increased by CPI.
547	Underground Service Relocation – Single Visit (Business Hours)	Previously included in item 534 in the approved 2013/14 pricing schedule. Charge increased by CPI.
548	Install surface mounted point of entry (POE) box	Cost previously recovered by applying item 531 in the approved 2013/14 pricing schedule. Charge reduced to more accurately recover the cost of materials and labour.
Temporary De-energisation		
561	Temporary de-energisation – HV (Business Hours)	Included in item 560 in the approved 2013/14 pricing schedule. Separated to allow more cost reflective charge to be applied in future. Increased by CPI
Supply Abolishment / Removal		
562	Supply Abolishment / Removal – Overhead (Business Hours)	Included in 530 in the approved 2013/14 pricing schedule. Charge increased by CPI.
563	Supply Abolishment / Removal - Underground (Business Hours)	Included in 531 in the approved 2013/14 pricing schedule. Charge increased by CPI.
Miscellaneous Customer Initiated Services		
564	Install & Remove Tiger Tails – Per Installation (Business Hours)	Previously a quoted service. Charge based upon current quotations.
565	Install & Remove Tiger Tails - Per Span (Business Hours)	Previously a quoted service. Charge based upon costs of materials.
566	Install & Remove Warning Flags – Per Installation (Business Hours)	Previously a quoted service. Charge based upon current quotations.
567	Install & Remove Warning Flags - Per Span (Business Hours)	Previously a quoted service. Charge based upon costs of materials.

Code	Service	Service Description / Scope
Connection Enquiry Processing - PV Installations*		
570	PV Connection Enquiry – LV Class 1 (<= 10kW Single Phase / 30kW Three Phase)	No charge.
571	PV Connection Enquiry – LV Class 2 to 5 (> 30kW <= 1500kW Three Phase	Charge to recover costs of providing services.
572	PV Connection Enquiry – HV	Charge to recover costs of providing services.
573	Network technical study for large scale installations	Charge to recover costs of providing services.
Network Design & Investigation / Analysis Services - PV Installations†		
574	Design & Investigation - LV Connection Class 1 PV (<= 10kW Single Phase / 30kW Three Phase)	No charge.
575	Design & Investigation - LV Connection Class 2 PV (> 30kW and <= 60kW Three Phase)	Charge to recover costs of providing services.
576	Design & Investigation - LV Connection Class 3 PV (> 60 kW and <= 120kW Three Phase)	Charge to recover costs of providing services.
577	Design & Investigation - LV Connection Class 4 PV (> 120 kW and <= 200kW Three Phase)	Charge to recover costs of providing services.
578	Design & Investigation - LV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – ActewAGL Network Study	Charge to recover costs of providing services.

Code	Service	Service Description / Scope
579	Design & Investigation - HV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – Customer Network Study	Charge to recover costs of providing services.
Rescheduled Site Visits		
590	Rescheduled Site Visit – One Person	New charge replacing item 540 in the approved 2013/14 pricing schedule. Charge reduced to reflect cost of wasted time of 1 worker assuming wasted time is minimised by reallocation of remaining duration of appointment time to another task.
591	Rescheduled Site Visit – Service Team	New charge replacing item 540 in the approved 2013/14 pricing schedule. Charge increased to reflect cost of wasted time of a team of 3 workers assuming wasted time is minimised by reallocation of remaining duration of appointment time to another task.

* This group of charges developed as capital contributions following tenders for large scale PV installations. (See: http://www.actewagl.com.au/~/media/ActewAGL/ActewAGL-Files/Products-and-services/Building-and-renovation/For-professionals/CCA0212-48%20guidelines-NoContacts.ashx)

† See: http://www.actewagl.com.au/~/media/ActewAGL/ActewAGL-Files/About-us/Publications/Guidelines-for-LV-embedded-generator-connections.ashx .

Table F.3 Indicative estimates of demand for ancillary network services, 2014/15

Code	*Service*	*Indicative estimate of demand*
Premise Re-energisation – Existing Network Connection		
501	Re-energise premise – Business Hours	5040
502	Re-energise premise – After Hours	1658
Premise De-energisation – Existing Network Connection		
503	De-energise premise – Business Hours	3650
505	De-energise premise for debt non-payment	245
Meter Reconfiguration		
507	Install Interval Meter	27
509	Install / Replace Meter – Micro Renewable Energy Installation	1000
Meter Investigations		
504	Meter Test (Whole Current) – Business Hours	18
510	Meter Test (CT/VT) – Business Hours	1
Special / Additional Meter Reads		
506	Special Meter Read	0
Temporary Network Connections		
520	Temporary Builders Supply – Overhead (Business Hours)	50
522	Temporary Builders Supply – Underground (Business Hours)	65
New Network Connections		
523	New Underground Service Connection – Greenfield	0
524	New Underground Service Connection – Greenfield Cable Only	0
525	New Underground Service Connection – Greenfield Metering Only	0
526	New Overhead Service Connection – Brownfield (Business Hours)	80
527	New Underground Service Connection – Brownfield from Front	130
528	New Underground Service Connection – Brownfield from Rear	200
Network Connection Alterations and Additions		
541	Overhead Service Relocation – Single Visit (Business Hours)	200
542	Overhead Service Relocation – Two Visits (Business Hours)	50
543	Overhead Service Upgrade – Service Cable Replacement Not Required	2
544	Overhead Service Upgrade – Service Cable Replacement Required	0
545	Underground Service Upgrade – Service Cable Replacement Not Required	15
546	Underground Service Upgrade – Service Cable Replacement Required	5
547	Underground Service Relocation – Single Visit (Business Hours)	50
548	Install surface mounted point of entry (POE) box	200
Temporary De-energisation		
560	Temporary de-energisation – LV (Business Hours)	150
561	Temporary de-energisation – HV (Business Hours)	44
Supply Abolishment / Removal		
562	Supply Abolishment / Removal – Overhead (Business Hours)	124
563	Supply Abolishment / Removal - Underground (Business Hours)	108

Code	Service	Indicative estimate of demand
Miscellaneous Customer Initiated Services		
564	Install & Remove Tiger Tails – Per Installation (Business Hours)	6
565	Install & Remove Tiger Tails - Per Span (Business Hours)	6
566	Install & Remove Warning Flags – Per Installation (Business Hours)	2
567	Install & Remove Warning Flags - Per Span (Business Hours)	2
Embedded Generation - Operational & Maintenance Fees		
568	Small Embedded Generation OPEX Fees - Connection Assets	0
569	Small Embedded Generation OPEX Fees - Shared Network Asset	0
Connection Enquiry Processing - PV Installations		
570	PV Connection Enquiry – LV Class 1 (<= 10kW Single Phase / 30kW Three Phase)	1000
571	PV Connection Enquiry – LV Class 2 to 5 (> 30kW <= 1500kW Three Phase	5
572	PV Connection Enquiry – HV	1
573	Network technical study for large scale installations	2
Network Design & Investigation / Analysis Services - PV Installations		
574	Design & Investigation - LV Connection Class 1 PV (<= 10kW Single Phase / 30kW Three Phase)	1000
575	Design & Investigation - LV Connection Class 2 PV (> 30kW and <= 60kW Three Phase)	2
576	Design & Investigation - LV Connection Class 3 PV (> 60 kW and <= 120kW Three Phase)	0
577	Design & Investigation - LV Connection Class 4 PV (> 120 kW and <= 200kW Three Phase)	0
578	Design & Investigation - LV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – ActewAGL Network Study	1
579	Design & Investigation - HV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – Customer Network Study	2
Rescheduled Site Visits		
590	Rescheduled Site Visit – One Person	14
591	Rescheduled Site Visit – Service Team	180

Attachment G Proposed connection policy

G1 Connection policy

G2 Model Standing Offer—basic connection services with small scale embedded generation

G3 Model Standing Offer—basic connection services without small scale embedded generation

Attachment G1 to Transitional Regulatory Proposal 2014/15

ActewAGL Distribution

Connection policy

VERSION 1.0

January 2014

Contents

Overview

ActewAGL Distribution's connection policy sets out the circumstances in which connection charges are payable and the basis for determining the amount of such charges. The policy has been prepared in accordance with the requirements in Chapter 5A of the National Electricity Rules (NER) and the Australian Energy Regulator's (AER's) *Connection charge guidelines for retail electricity customers, under Chapter 5A of the National Electricity Rules, version 1.0* (AER connection charge guidelines). The policy uses the terminology and concepts used in the NER and the guidelines. This overview provides a simplified summary of the key elements of the policy.

The connection charges payable by a connection applicant will depend on the type of connection and the connection assets and services involved. In general the total charge for a new connection or altered connection may comprise:

- *A capital contribution toward the costs of the assets used to provide the connection.* Where the estimated incremental costs of a connection exceed the estimated incremental revenue, the connection applicant may be required to make a contribution toward the costs of the premises connection assets and any required network extensions. A shared network augmentation charge may also apply where the customer's estimated maximum demand exceeds the threshold of 100 Amps per phase and augmentation of shared network assets is required.
- *Charges for ancillary services, services provided at above minimum standard requirements at the customer's request, and special connection requirements*. Ancillary services may include asset removals or relocations, temporary connections and service upgrades. Connection applicants pay for any required ancillary services, on a cost recovery basis at rates approved by the AER. The additional costs of above standard connections or special requirements (for example due to difficult site conditions) must also be paid by the connection applicant, at AER approved rates.
- *Charges payable under the pioneer scheme.* Where a connection involves the use of extension assets paid for by an original customer, within the past 7 years, the subsequent customer may be required to make a contribution towards the cost of the extension assets. The original customer may be eligible for a refund.

Charges will also apply for metering services required for the connection. Metering charges are not covered by the connection policy. The AER sets prices for the regulated metering services provided by ActewAGL Distribution, as part of the 5-yearly distribution determination.

The connection policy sets out the connection charges that may apply for 14 different types of connections (see Chapter 4), ranging from basic connections (requiring no augmentation of the network) for residential and small commercial customers on unserviced blocks in urban areas,

through to large (>100 Amps) commercial connections requiring a new substation, subdivision estate reticulation, and embedded generator connections.

Residential and small low voltage commercial customers in urban areas seeking a basic connection, which does not require network augmentation or extension and involves maximum demand of less than 100 Amps, will generally not be required to make a capital contribution. Charges will apply, on a fee or quoted basis, where the connection involves customer specific ancillary services (such as a temporary connection) or services above the least cost technically acceptable standard or special requirements. The pioneer scheme will generally not apply to residential and small commercial customers, although it may in some cases – for example for rural connections requiring network extensions.

Larger commercial customers and real estate developers may be required to make a capital contribution toward the costs of premises connection assets and network extensions, depending on the outcome of the incremental cost-revenue-test (ICRT). Design and administration costs will be included in the calculation of the required contribution. A shared network augmentation charge may also apply, along with charges for ancillary services and higher standard services or special requirements. The pioneer scheme may also apply to these connection applicants.

The connection policy also contains requirements for financial guarantees and prepayments. Where ActewAGL Distribution considers there is a significant risk that it may not earn the estimated incremental revenue from the connection applicant, it may require a financial guarantee in the form of a bank guarantee. This will generally only apply to large connections that are the subject of a negotiated offer. For connections where the estimated connection charges are greater than $50,000, ActewAGL Distribution requires an advance payment of 50 per cent of the total charges and a bank guarantee for the balance. Full prepayment is required at the time the connection offer is formally accepted for connections where the estimated connection charges are less than $50,000.

1 Purpose and scope

ActewAGL Distribution has prepared this connection policy in accordance with the requirements in Chapters 5A and 6 of the *National Electricity Rules* (NER) and the Australian Energy Regulator's (AER's) *Connection charge guidelines for retail electricity customers, under Chapter 5A of the National Electricity Rules, version 1.0* (AER connection charge guidelines). The connection policy sets out the circumstances in which connection charges are payable and the basis for determining the amount of such charges.

The connection policy applies to all:

- new connections to ActewAGL Distribution's electricity network; and,
- modifications or alterations to existing connections to ActewAGL Distribution's electricity network;

requested after 1 July 2014, provided that the party requesting the new or modified connection is not a registered participant, as defined in the NER.[1] In the event that the party is a registered participant, ActewAGL Distribution will assess the connection application in accordance with Chapter 5 of the NER.

As well as the requirements relating to connection charges and connection policies (in Part E), Chapter 5A of the NER contains requirements for model standing offers (MSOs), connection contracts, negotiated connections, connection applications and dispute resolution. These matters are beyond the scope of the connection policy.[2] Information on connection application processes, timeframes and contracts and copies of ActewAGL Distribution's MSOs can be found on ActewAGL Distribution's website.[3]

This connection policy (version 1.0) applies for the transitional regulatory period, from 1 July 2014 to 30 June 2015. The connection policy for the subsequent regulatory period, from 1 July 2015 to 30 June 2019, will be submitted to the AER for approval in May 2014, as required under the NER.[4]

[1] NER Chapter 10, Glossary

[2] Connection policy is defined in the Chapter 5A of the NER: "*connection policy* means a document, approved as a connection policy by the *AER* under Chapter 6, Part E, setting out the circumstances in which *connection charges* are payable and the basis for determining the amount of such charges".

[3] See http://www.actewagl.com.au/About-us/Publications.aspx

[4] NER clause 6.8.2(5A)

2 ActewAGL Distribution's connection services

ActewAGL Distribution provides 3 broad types of connection services.

2.1 Basic connection services

Basic connection services involve a connection between a distribution system and customer's premises (excluding a non-registered embedded generator's premises) in the following circumstances:

(a) either:

- the retail customer is typical of a significant class of retail customers who have sought, or are likely to seek, the service; or
- the retail customer is, or proposes to become, a micro-embedded generator; and

(b) provision of the service involves minimal or no augmentation of the distribution network; and

In any case, maximum demand is not more than 100 Amps per phase.

In accordance with Chapter 5A of the NER, ActewAGL Distribution has prepared two model standing offers (MSOs) for basic connection services – one for retail customer connections which do not include micro-embedded generators and one for customer connections which include micro-embedded generators.[5] The MSOs have been submitted with this connection policy for AER approval.

2.2 Major connection services

Major connections are primarily connections which have one or more of the following characteristics:

- maximum demand is greater than 5 MVA or
- the site includes embedded generation of greater than 30 kW or
- the site situation is complex or sensitive.

2.3 Minor or routine connection services

These are all remaining types of the connections which fall outside the above two categories. Minor and routine connections are too complex to be considered basic, but too small to be

[5] Micro-embedded generators are up to 10 kW for single phase generators and 30 kW for three phase connections

considered major connections. These connections are generally for projects between 100 Amps per phase and 5 MVA.

Major and minor/routine connections usually include some components which are negotiated and other components which are subject to regulated charges, depending on the parameters of the job. For example, a customer may have special requirements relating to reliability or the location of a substation.

An indicative classification of connection types into the basic, minor/routine and major categories is shown in Table 1. The exact classification depends on individual job parameters and the scope of work.

The connection charges that apply to each of the connection types listed in Table 1 will depend on the connection services and ancillary services required – for example whether network extensions or augmentations are required, whether asset removals and relocations are required, and whether the customer requests services to a standard above the least cost technically acceptable standard (LCTAS). The full list of connection services and ancillary services offered by ActewAGL Distribution is provided in Attachment A to this policy.[6]

Connection offers will include an itemised statement of the relevant cost components and connection charges.[7] The potential cost components are listed in Table 2. The first three items (A, B and C) are the most commonly applied.

[6] For completeness, the tables in Attachment A also includes other services (eg metering) which may be required as part of the connection.

[7] As required by clause 5A.E.2 of the Rules. The itemised statement will include any metering costs, where relevant.

Table 1: Indicative classification of connection types

	Type of connection	*Basic*	*Minor / Routine*	*Major*
1	Single service connection – residential or small commercial load, urban location, greenfield	✓	✓	
2	Single service connection – residential or small commercial load, urban location, brownfield/already serviced block	✓	✓	
3	Single service connection – residential or commercial load, rural area	✓	✓	
4	Low voltage (LV) consumer mains		✓	
5	LV commercial or residential connection (no substation required)	✓	✓	
6	LV commercial or residential connection (substation required)		✓	✓
7	High voltage (HV) commercial connection		✓	✓
8	Subdivision estate reticulation, residential underground, typical		✓	
9	Subdivision estate reticulation, residential or commercial or mixed load, non typical		✓	✓
10	Multi-unit block (no substation required)		✓	
11	Multi-unit block (substation required)		✓	
12	Extra large block reticulation (multi hectare blocks)		✓	✓
13	Embedded generator < 30 kW	✓	✓	
14	Embedded generator 30 kW to =>5 MW*		✓	✓
15	Temporary connections	✓	✓	

* Embedded generator connections other than micro-generators (<30kW) connected as part of the basic connections are not covered by Chapter 5A of the NER. However, for completeness these connections are included in this policy document.

Table 2: Customer connections – potential cost components

	Cost component	*Description*
A	Premises connection assets	These assets are dedicated (or predominantly dedicated) to the single customer connection, normally located on the customer's premises or in the immediate vicinity of the customer's premises (the location may depend on planning requirements). These assets are unlikely to be used for the supply of other customers. Customers may be required to make a reasonable capital contribution towards the cost of premises connection assets in certain circumstances (see Chapters 3 and 4 of this policy). The required capital contribution will be determined using the incremental cost-revenue-test (ICRT) as specified in the AER connection charge guidelines (see Attachment B of this policy). The required capital contribution may be adjusted for in-kind contributions made by the customer (for example it may be more efficient for a developer to provide some civil works). The in-kind contribution will generally be valued at the avoided cost to ActewAGL Distribution.
B	Extensions	Extensions involve extending the network outside the present boundaries. For load customers the extension assets are located between the existing network (upstream linkage point) and the premises connection assets. For reticulation, such as subdivision estate reticulation, extension assets are located between the existing network (downstream linkage point) and estate reticulation assets. These are shared assets or dedicated assets that could be shared. These assets extend the existing network to a connected new site – for example: • Point-of-Entry cubicle that can be looped out of to supply another customer, chamber substations (even those located within a customer block) that can be used to supply an alternative customer, HV and LV cables that are extended to a new customer, but can be used to supply an alternative customer. Customers may be required to make a reasonable capital contribution towards the cost of extension assets in certain circumstances. The required capital contribution will be determined using the ICRT. More information is provided in Chapters 3 and 4 and Attachment B of this policy. The required capital contribution may be adjusted for in-kind contributions made by the customer (for example it may be more

	Cost component	Description
		efficient for a developer to provide some civil works). The in-kind contribution will generally be valued at the avoided cost to ActewAGL Distribution.
C	Design and administration	Design and administration costs relating to the connection, including but not limited to design, asset acceptance, project management, project administration, tendering and procurement.[8] These may be included in the ICRT, in accordance with the AER connection charge guidelines.
D	Shared network augmentation	Augmentation means works to enlarge the capability of the distributor's network to distribute electricity. The works may include: • Replacement of existing assets with assets of increased capacity or capability – for example, replace HV or LV cable with a larger cable, transformer upgrade to a larger transformer. • Installation of a new asset to increase the capacity of an existing segment of the network – for example, install an additional transformer in an existing substation. • Installation of a new asset to increase the performance, functionality or capability of the existing shared network – for example, install additional switchgear into the network. Augmentation may involve augmentation of shared or dedicated assets. This cost category (D) only covers shared network augmentation. Augmentation of the shared network refers to shared network assets capacity and capability increases, other than extensions. Augmentation of dedicated assets is included in premises connection assets (cost category A above) or extensions (category B above) as applicable. Shared network augmentation charges ($/kVA) may apply in certain

[8] For connections which require significant design early in the process and, in the assessment of ActewAGL Distribution, there is a high risk of the project not going ahead, a deposit for detailed design may be required before design commences (see detailed schedule of services for which a charge may apply in Attachment A). Some network technical enquiry and connection enquiry costs related to specific connections may be recovered up-front through ancillary charges, in particular those that involve costs which are incurred as part of feasibility studies and assessment of connection options.

	Cost component	Description
		circumstances, as described in Chapters 3 and 4 of this policy. Customers with load below the 100 Amps per phase threshold are exempt from the shared network augmentation charges.
E	Requirements above least cost technically acceptable standard (LCTAS) and special requirements	Special requirements may be related to legal or statutory requirements, specific site requirements or other parameters of the job. Examples of above standard requirements include: • provision of a chamber substation instead of a padmount substation, higher reliability, better security of supply, excess length of cable to supply a substation at the back of the customer's block to satisfy architectural requirements, provision of a basement substation, developer requirements for subdivision estate reticulation. Special connection requirements may also be a result of the works scope or parameters rather than customer/developer preferences. For example: • difficult ground conditions with high rock content, difficult site access, significant additional costs related to traffic management. Customers requesting a connection service of a higher standard than the LCTAS, or with special requirements, will be required to pay the additional costs. More information is provided in Chapters 3 and 4 of this policy.
F	Asset relocation and removal	Relocation/removal of existing shared or dedicated assets where the request to relocate/remove is integral to the connection works. If the relocation or removal is not part of the connection works (for example if a pole relocation is requested by a customer), the work is not covered by Chapter 5A of the NER. These charges will be set on a cost reflective basis, with standard fees applying to typical services (for example a simple relocation of a single dwelling service) while non-typical services will be offered on a quoted basis. The charges will be as approved by the AER in the relevant ACT distribution determination.
G	Other ancillary services	The connection may also require other ancillary services – for example a temporary connection or disconnections. The full list of ancillary services is provided in Attachment A to this policy. Ancillary services

Cost component	Description
	charges are set on a cost reflective basis, with standard fees applying to typical services while non-typical services are offered on a quoted basis. The charges will be as approved by the AER in the relevant ACT distribution determination.

A connection may also require metering services relating to type 5 and type 6 meters. ActewAGL Distribution is an approved metering services provider for type 5 and type 6 meters. Type 1 to 4 meters are provided by accredited metering service providers operating in a contestable market. The metering charges for type 5 and 6 meters will be as approved by the AER in the relevant ACT distribution determination.

The itemised schedule of charges for a connection may also include an amount calculated under ActewAGL Distribution's pioneer scheme. The scheme involves refunds and charges which may apply to extension assets which are paid for by an original customer but are shared with a subsequent customer within 7 years. Details on the pioneer scheme are provided in Chapter 6 of this policy.

ActewAGL Distribution's policy for determining the connection charges for each of the potential cost components shown in Table 2, and the basis on which the connection charges are determined, are described in Chapters 3 and 4 of this policy document. The policy is consistent with the connection charge principles in Chapter 5A of the NER and the AER connection charge guidelines.

3 Basis for determining connection charges

The method ActewAGL Distribution applies in determining connection charges depends on how the connection service is classified by the AER in the relevant ACT distribution determination.[9]

3.1 Standard control services

For the 2014-19 regulatory period the AER has classified most of ActewAGL Distribution's connection services as standard control services.[10] The costs of providing standard control services are generally recovered through network tariffs. An up-front capital contribution may only be required if provisions for the costs have not already been made through existing distribution use of system charges or a tariff applicable to the connection.[11]

Where an up-front capital contribution is required for standard control services, it is calculated using the incremental cost-revenue-test (ICRT). Under this test, ActewAGL Distribution may seek a capital contribution for standard control connection services from a connection applicant if the incremental cost of the standard control connection services exceeds the estimated incremental revenue expected to be derived from the connection.[12] Details on the application of the ICRT are provided in Attachment B to this policy. The cost components typically included in the ICRT calculation for different types of connections are explained in Chapter 4 of this policy.

As permitted under clause 5.5 of the AER connection charge guidelines, ActewAGL Distribution offers a schedule of pre-calculated capital contributions for some types of connection services. The pre-calculated charges are based on the application of the ICRT averaged across similar services and expected usage characteristics.

ActewAGL Distribution has pre-calculated capital contributions for the following types of connections:

- Subdivision estate reticulation; and
- Connection of HV customers.

For other types of connections the ICRT is applied on a case-by-case basis.

[9] This is consistent with the approach set out in the AER connection charge guidelines, Chapters 2 to 5

[10] AER 2013, *Stage 1 framework and approach paper, ActewAGL*, March

[11] Rules clause 5A.E.1(c)(6)

[12] AER connection charge guidelines, clause 5.1.2

3.2 Alternative control services

Connection services may also require ancillary services, such as asset relocations and removals, customer requirements above LCTAS and special customer requirements. The AER has classified these services as alternative control services for the 2014-19 regulatory period (see Attachment A).

The charges for these ancillary services are on either a fixed fee or quoted basis, as specified by the AER in the relevant ACT distribution determination.[13] Fixed fees will generally apply for standard or typical services, where costs can be averaged across similar service characteristics. Where the service varies from the standard type a quote will be provided. For example, service upgrades will be subject to fixed charges unless the specific requirements make the job more complex, for example due to significant obstacles to site access, or distances beyond the typical parameters of a service connection. Where service specifications change or new services are added during the regulatory period, for example as a result of new planning or other regulatory requirements, ActewAGL Distribution will submit to the AER proposed amendments to the relevant model standing offers.[14]

3.3 Negotiated services

For services classified by the AER as negotiated services, the connection charges will be agreed by the connection applicant and ActewAGL Distribution, in accordance with the provisions in Chapter 5A of the NER. ActewAGL Distribution may require an offer fee for negotiation and preparation of a negotiated connection offer.[15] Where a fee is required, that fee must be paid prior to any negotiations and prior to ActewAGL Distribution providing an offer to connect. The fee for preparation of the offer will not exceed the amount in ActewAGL Distribution's price schedule, available at http://www.actewagl.com.au/About-us/Publications.aspx (follow Electricity; ACT; Electricity Network Prices).

3.4 Summary

The potential cost components (or aspects of the connection service)[16], the AER classification, and the basis for determining the charges are summarised in Table 3. Details on the charges that may apply for each type of connection are then provided in the Chapter 4 of this policy.

[13] AER connection charge guidelines, clause 4.1.2

[14] In accordance with clause 5A.B.6 of the NER

[15] As permitted under clause 5A.C.4 of the NER

[16] Clause 6.7A.1(b)(ii) requires the connection policy to set out the "aspects of a connection service" for which a connection charge may apply.

Table 3: AER classification of services and the basis for connection charges

Cost component	*AER classification*	*Basis for connection charges*
A Premises connection assets	Standard control*	Where an up-front capital contribution is applied for standard control services, it is calculated using the ICRT for a specific connection or a category of connections. Details on the ICRT and its application to each type of connection are provided in Chapter 4 and Attachment B.
B Extensions	Standard control*	As above
C Design and administration	Standard control*	As above
D Shared network augmentation	Standard control*	Capital contributions for shared network augmentation do not apply to load connections of 100 Amps per phase and below. Customers with load above 100 Amps per phase are required to make a $/kVA contribution toward the cost of augmentation of shared network assets. Developers, including developers of subdivision estates, are also required to pay the $/kVA charge. More details on the shared network augmentation charge are provided below this table. Shared network augmentation charges may apply to embedded generation connections (other than micro generators <30kW connected as part of the basic connection under the relevant model standing offer). Where shared network augmentation charges apply to embedded generators they are calculated using the ICRT to ensure that any load is taken into account for a connection which includes load as well as generation.
E Customer requirements above the least cost acceptable standard (LCTAS) and special connection requirements	Alternative control	The charges will be set to fully recover the cost of the above standard requirements and special connection requirements. The charges will generally be on a quoted basis.

Cost component	*AER classification*	*Basis for connection charges*
F Asset relocations and removals	Alternative control	The charges for these ancillary services are on either a fixed fee or quoted basis, as specified in the relevant ACT distribution determination.‡ Fixed fees will generally apply for services typical to the category of connection, where costs can be averaged across similar service characteristics. Where the service varies from the standard type a quote will be provided.
G Other ancillary services relating to connections†	Alternative control	The charges are levied either on a fixed fee or quoted basis. The charges are as approved by the AER in the relevant ACT distribution determination.

*The standard control service refers to the premises connection assets, extensions, administration and design costs and augmentations which are provided as part of the LCTAS. Additional requirements above LCTAS are classified as alternative control.
†The full list of ActewAGL Distribution's ancillary services is provided in Attachment A to this policy.
‡Consistent with the AER connection charge guidelines, clause 4.1.2

3.5 Shared Network Asset Augmentation Charge ($/kVA) – Upstream Augmentation

The upstream augmentation charge is not intended to recover the full cost of shared network augmentation. It is intended to provide a pricing signal to discourage customers and developers from requesting excessive capacity to service developments. The charge provides an incentive for customers to request only capacity sufficient to meet their requirements. The charge is levied in $/kVA where kVA refers to the estimated customer maximum demand. The charge covers partially the costs of future augmentation of distribution substations and 11 kV and 22 kV feeders. Other upstream assets such as zone substations, switching stations and transmission and subtransmission lines are fully funded by ActewAGL Distribution and are not subject to the charge.

The upstream augmentation charge is calculated by first establishing an average (or benchmark) cost per kVA for augmenting:

* High Voltage (11 kV and 22 kV) feeders; and
* Distribution substations.

The cost applicable to each asset is adjusted by the relevant diversity factor. The factor takes into account the fact that consumers' peak demand draws on the capacity of the network at different times. Therefore, the capacity required for many customers is less than the sum of their capacity requirements. To provide a price signal ActewAGL Distribution's charges are

designed to contribute approximately 25 per cent of the shared network asset augmentation costs.

Developers or customers connecting directly to the HV feeders will pay the upstream augmentation charge applicable for augmenting HV feeders. Developers connecting to a distribution substation will pay the upstream augmentation charges applicable to distribution substations and HV feeders. Developers connecting to the LV circuits would pay the upstream augmentation charge applicable to the distribution substation and HV feeder. If the customer already pays for the upstream asset, such as in the case of dedicated feeders for HV customers, the charge is not levied on those customers to ensure there is no double charging.

The customer's estimated maximum demand will be calculated using the method applied for the ICRT. Details are provided in Attachment B of this policy.

The revenue received from upstream augmentation charges is offset against the regulated asset base. That is, the value of the asset contributed by the customer through the shared network augmentation charge is not included the regulated asset base.[17]

[17] Consistent with clause 11.1.1 of the AER connection charge guidelines (Treatment of augmentation assets).

4 Charge components by connection type

The connection charges payable for each type of connection will depend on the outcome of the application of the ICRT and the particular requirements of the connection. If the outcome of the ICRT is that the estimated incremental revenue exceeds the estimated incremental costs, then the connection is said to "pass the ICRT", so no capital contribution will be required for premises connection assets or network extensions.

The connection types listed in this chapter correspond to the list in Table 1 (in Chapter 2 of this policy). The following legend applies to the tables for each of the connection types.

Legend for connection charges tables in Chapter 4	
✓	Charge applies
X	Charge does not apply or rarely applies
+	Charge may apply depending on the scope and parameters of the connection

4.1 New single service connection (<100 Amps) residential or commercial customer, greenfield and unserviced blocks, urban location

Generally these types of connections are classified as basic connections and pass the ICRT. Residential and small commercial customers seeking a basic connection (as defined in Chapter 2 of this policy and the approved MSOs) on unserviced blocks will not be required to make a contribution to the costs of premises connection assets (A), network extensions (B), design and administration (C) and augmentation of shared network assets (D). These costs will be fully recovered in network tariffs. The ICRT will be applied, and a capital contribution required, only in unusual cases. The pioneer scheme does not apply to this type of connection.

Table 4: Breakdown of costs – single service connections to residential or commercial customers, greenfield and unserviced blocks, urban location

	Cost component	*Charge*	*Comment*
A	Premises connection assets	X	No charge for LCTAS connection.
B	Extensions	X	No charge for LCTAS connection.
C	Design and administration	X	No charge for design and administration relating to LCTAS connection.
D	Shared network augmentation	X	No charge. The load is below the shared network augmentation charge threshold.
E	Customer requirements above LCTAS and special connection requirements	+	May apply but generally does not apply to new connections of this type.
F	Asset relocation and removal	+	Generally not relevant to new connections of this type in greenfield locations.
G	Other ancillary services	+	Some ancillary service charges may apply.

4.2 New single service connection (<100 Amps) residential or commercial customer, brownfield or already serviced blocks, urban location

Residential or commercial customers seeking a basic single service connection on serviced blocks will generally not be required to make a contribution to the costs of premises connection assets (A), network extensions (B) or design and administration (C) up to the cost equivalent to a new LCTAS connection in a greenfield area. These customers are not required to contribute to the cost of augmentation of shared network assets (D) as they are below the threshold.

New service connections in brownfield areas and already serviced blocks often require additional work due to constrained access to the site and accessibility of the network linkage point. For high volume residential connections a fixed fee reflecting an average additional cost applies. For other types of connections, if the cost of connection is higher than the LCTAS greenfield connection, a contribution equivalent to the additional cost is charged to the customer. That is, the customer seeking a new service connection in brownfield areas receives a rebate equivalent to the cost of the LCTAS greenfield connection.

Standard service upgrades are charged in accordance with the approved ancillary charges. Other ancillary charges may apply for various work components. For example, a new service connection in already serviced blocks may require relocation/removal of the existing service.

Standard service relocations are subject to the AER approved ancillary charges. For above standard services or special requirements quoted charges may apply.

The pioneer scheme does not apply to this type of connection.

Table 5: Breakdown of costs – single service connections (<100 Amps) to residential or commercial customers, brownfield or already serviced blocks

	Cost component	*Charge*	*Comment*
A	Premises connection assets	✓	For a typical brownfield residential connection a fixed fee reflecting a higher cost of connection compared with LCTAS applies. No charge for premises connection if the cost does not exceed the LCTAS greenfield connection. For residential service upgrades, generally a fixed fee will apply. For other types of connection in this category the capital contributions will be based on quoted cost minus the rebate equivalent to LCTAS greenfield connection.
B	Extensions	X	Rarely applies to connections of this type.
C	Design and administration	X	Rarely applies to connections of this type.
D	Shared network augmentation	X	No charge. The load is below the shared network asset charge threshold.
E	Customer requirements above LCTAS and special connection requirements	+	Often applies to this type of connection in brownfield areas. Charges will apply on a quoted basis.
F	Asset relocation and removal	+	Likely to apply in brownfield areas and already serviced blocks. Fixed fees apply to typical residential asset relocations and removals. Quoted charges apply to other asset relocations and removals.
G	Other ancillary services	+	Other ancillary service charges will apply where relevant.

4.3 *New single service connection (<100 Amps) residential or commercial load, rural area*

The ICRT is applied to standard components of the connection cost: premises connection assets (A), extensions (B) and design and administration (C). If the connection passes the ICRT, the

treatment is the same as for single service connections in an urban area (see section 4.1 above). If the connection does not pass the ICRT, the applicable capital contribution is calculated by applying the ICRT to the connection. A rebate equivalent to the cost of a new greenfield LCTAS connection is applied.

If the customer pays a capital contribution towards the cost of network extension (B), the extension will be subject to the pioneer scheme for a period of 7 years.

Table 6: Breakdown of costs – connection which does NOT pass the ICRT test, new single service connection, residential or commercial load, rural area

	Cost component	*Charge*	*Comment*
A	Premises connection assets	✓	Capital contribution calculated using ICRT, less rebate equivalent to the LCTAS greenfield connection.
B	Extension	✓	As above.
C	Design and administration	✓	As above.
D	Shared network augmentation	X	No charge. The load is below the shared network augmentation charge threshold.
E	Customer requirements above LCTAS connection and special connection requirements	+	Generally does not apply, but may apply depending on the specific requirements of the connection.
F	Asset relocation and removal	+	Generally does not apply to new connections of this type.
G	Other ancillary services	+	Some ancillary service charges may apply.

4.4 LV commercial or residential connection (> 100 Amps) (no distribution substation required)

These connections are provided from an existing substation located in the vicinity of the load through a low voltage cable or overhead line. Generally all connections of this type pass the ICRT, so a capital contribution is not required for connection assets (A), extension (B) and design and administration (C) for the LCTAS connection. A $/kVA charge is levied towards augmentation of the shared network upstream assets if the load is above 100 Amps per phase.

Charges may apply due to above standard and special requirements (E), asset relocation and removal (F) and other ancillary services (G) depending on the connection requirements.

Generally the pioneer scheme does not apply to this type of connection.

Table 7: Breakdown of costs – (>100 Amps) typical LV commercial or residential connection (no distribution substation required), brownfield or greenfield

	Cost component	*Charge*	*Comment*
A	Premises connection assets	X	No charge for LCTAS connection.
B	Extensions	X	No charge for LCTAS connection
C	Design and administration	X	No charge for LCTAS connection
D	Augmentation shared network	✓	$/kVA charge applies.
E	Customer requirements above the LCTAS connection and special connection requirements	+	May apply depending on customer requirements and special connection requirements.
F	Asset relocation and removal	+	Generally not applicable in greenfield areas. Likely to apply in brownfield areas and on already serviced blocks. Usually a quoted service.
G	Other ancillary services	+	Some charges may apply depending on the scope of the job. For example, disconnection charges may apply on already serviced blocks.

4.5 LV consumer mains

This is an LV connection provided to a customer through LV consumer mains from the point of entry to a designated location on the customer's block or from an ActewAGL Distribution substation to a designated location on the customer's block. With respect to connection charges, this type of connection is treated in the same way as the LV connections described in sections 4.4 and 4.6. However, if the load is below 100 Amps the $/kVA charges for augmentation of the shared network assets do not apply. ActewAGL Distribution is normally responsible for the installation of premises connection assets, network extensions and augmentations. The customer is expected to install consumer mains and provide a trench/conduit to the boundary of the block to enable a customer's connection to the network by ActewAGL Distribution.

4.6 LV commercial or residential connection (> 100 Amps) (distribution substation required)

For these connections the distribution substation is provided either as a part of premise connection assets or as part of the network extension, depending on whether the substation is a dedicated asset or a shared network asset.

Typically connections in this category pass the ICRT, so no capital contribution is required for premises connection assets (A), network extension (B), design and administration (C). Generally the pioneer scheme does not apply to this type of connection, because the connections pass the ICRT.

Table 8: Breakdown of costs – typical LV commercial or residential connection >100 Amps (distribution substation required)

	Cost component	*Charge*	*Comment*
A	Premises connection assets	X	No charge for LCTAS connection
B	Extensions	X	No charge for LCTAS connection.
C	Design and administration	X	No charge for LCTAS connection
D	Shared network augmentation	✓	$/kVA charge applies.
E	Customer requirements above LCTAS connection and special connection requirements	+	May apply depending on the customer requirements.
F	Asset relocation and removal	+	Generally not applicable in greenfield areas. Likely to apply in brownfield areas and on already serviced blocks. Quoted service.
G	Other ancillary services	+	Some charges may apply depending on the scope of the job – for example disconnection charges may apply on already serviced blocks.*

*Network technical enquiry and network study charges and contract negotiation charges may also apply. These charges are more likely to apply to this connection than to other smaller connections. Connections of this type may involve considerable design costs. An upfront design deposit may be requested before design commences.

4.7 HV commercial connections

ActewAGL Distribution offers four different HV tariffs involving different HV and LV ownership and maintenance responsibilities. The lower HV tariffs reflect the fact that HV customers are charged a capital contribution for connection assets (A), extensions (B), design and administration (C). HV customers effectively pay for all the capital works on the dedicated

distribution feeders and distribution substations including increases in capacity/upgrades. The requirement to pay for the LV network depends on the ownership of the LV network assets reflected by the tariff paid by the customer.

Generally the pioneer scheme does not apply, because extension assets which the customer pays for remain dedicated assets.

Table 8: Breakdown of costs – typical HV commercial connection

	Cost component	*Charge*	*Comment*
A	Premises connection assets	✓	Capital contribution. Customer pays for the premise connection assets.
B	Extension	✓	Capital contribution. Customer pays for extensions.
C	Design and administration	✓	Capital contribution. Customer pays for the design and administration costs
D	Augmentation shared network	X	Generally does not apply. $/kVA charge applies only in relation to assets for which customer does not pay as part of A or B.
E	Customer requirements above LCTAS connection and special connection requirements	+	May apply depending on the customer requirements and special connection requirements.
F	Asset relocation and removal	+	May apply depending on the location and scope of connection. Likely to apply in brownfield areas and on already serviced blocks.
G	Other ancillary services	+	Some charges may apply depending on the scope of the job.*

*Network technical enquiry and network study charges and contract negotiation charges may apply. Connections of this type may involve significant design costs. An upfront design deposit may be requested before design commences.

4.8 Subdivision estate reticulation, residential underground, typical

The reticulation of a subdivision is initiated at the request of the real estate developer. ActewAGL Distribution treats the developer in a way similar to a single load customer.

To reticulate a subdivision estate ActewAGL Distribution has to install network electrical infrastructure, in particular substations, pits or mini pillars and cables. The developer provides civil infrastructure including the trench used for electrical reticulation and other shared services.

The reticulation involves reticulating within the estate from the linkage point with the upstream network to the downstream customer linkage points which are later used to connect individual customers to the network. The downstream linkage point is usually either at the pit or pillar (depending on the type of underground reticulation system employed). The reticulation assets are located between these linkage points.

ActewAGL Distribution assesses whether the subdivision estate is a typical estate. This is done on the basis of the ratio of single residential blocks to multi-unit blocks, network extension requirements and inclusion of non-residential load, such as shops, offices or schools.

If an estate is assessed as a typical estate, a capital contribution in the form of charge per block is applied to each single residential block. Per block capital contributions are applied in a two tier structure: one charge for blocks up to 650 sq m and another for blocks 650 to 1100 sq m. Developments on multi-unit blocks (that is, medium density and higher density developments) usually pass the ICRT. Consequently capital contributions do not apply to multi-unit blocks.

In the case of subdivision estate reticulation the electrical infrastructure within the estate (that is, cables, pillars/pits, substations) are treated in a way similar to connection assets (A) of a load customer.

Any headworks required between the existing network and the estate is considered to be an extension (B). An extension may involve multiple cables installed in single trench for the connection of future estates and customers. Usually the capacity of an extension is taken up by the load within a reasonably short period of time, therefore extensions are generally excluded from the ICRT for a typical estate and consequently they are not subject to a capital contribution. The extension cost (B) is included in the ICRT only if it is used for a single estate and there is no reasonable prospect that it will be used for other estates within 7 years. This typically applies to subdivisions in rural locations. If the developer pays a capital contribution towards an extension for a single subdivision the extension will be subject to the pioneer scheme.

If the subdivision estate reticulation is assessed as a non typical estate, the ICRT is applied to calculate the required capital contribution (see section 4.9 below).

Generally the pioneer scheme does not apply, because extensions (headworks) are not subject to capital contributions for most estates.

Table 9: Breakdown of costs - typical residential subdivision estate reticulation

	Cost component	*Charge*	*Comment*
A	Connection assets (i.e. *reticulation assets)*	✓	Capital contribution charged on per block basis for single dwelling blocks.
B	Extension (ie headworks)	X	Generally no charge. See comment in section 4.8
C	Design and administration	✓	As above for the connection assets.
D	Augmentation shared network	✓	$/kVA charge applies
E	Customer requirements above least cost technically acceptable connection and special connection requirements	+	May apply depending on the developer requirements and special reticulation requirements e.g. special mini-pillar offsets or locations, changes in scope by the developer after design commences
F	Asset relocation and removal	+	Applicable in many cases due to a need for relocation or removal of the existing assets within the estate. Quoted service
G	Other ancillary services	+	Some charges may apply depending on the scope of the job.

*Contract negotiation charges may apply. Connections of this type may involve considerable design costs. An upfront design deposit may be requested before design commences. Additional charges may apply to changes of scope and requirements by developers after design commences

4.9 Subdivision estate reticulation, residential or commercial or mixed load, non typical

If the subdivision estate reticulation is assessed by ActewAGL Distribution as a non typical estate, the ICRT is applied to calculate the required capital contribution. The electrical infrastructure assets within the estate (that is, cables, pillars/pits, substations) are considered to be connection assets (A). Since the developer is treated as a single customer, these assets are considered dedicated assets for the purpose of the estate.

Any headworks required between the existing network and the estate are considered to be extensions (B). Most extensions are built for the use of many retail customers. The cost of headworks (that is, extensions) is generally excluded from the ICRT. Therefore the pioneer scheme usually does not apply to subdivision estates.

The extension cost (B) is included in the ICRT only if it is used for a single estate and there is no reasonable prospect that it will be used for other estates within 7 years. This may apply to

subdivisions in rural locations. If the developer pays a capital contribution towards an extension for a single retail customer, the extension will be subject to the pioneer scheme.

Table 10: Breakdown of costs – non-typical residential, commercial and mixed subdivision estate reticulation.

	Cost component	*Charge*	*Comment*
A	Connection assets (i.e. estate reticulation assets)	✓	Capital contribution. Subject to ICRT.
B	Extension (ie. headworks)	X	Generally no charge. See comment in section 4.9.
C	Design and administration	✓	As above for the connection assets. Subject to ICRT.
D	Augmentation shared network	✓	$/kVA charge
E	Customer requirements above the LCTAS connection and special connection requirements	+	Often applies to non-typical estates due to developer requirements and special reticulation requirements.
F	Asset relocation and removal	+	Applicable in many cases, due to need for relocation or removal of the existing assets within the estate. Quoted service.
G	Other ancillary services	+	Some charges may apply depending on the scope of the job.*

*The reticulation usually requires considerable investment from ActewAGL Distribution. Contract negotiation charges may apply. Connections of this type may involve considerable design costs. An upfront design deposit may be requested before design commences. Additional charges may apply to changes of scope and changes in requirements by developers.

4.10 Multi-unit block (no substation required)

The connection of a load on multi-unit blocks consists often of two distinct parts. The first part is the connection of the block and, if applicable, the second part is the reticulation of power within the block. Depending on the design, not all multi-unit blocks require internal block reticulation.

The first part, the connection of the multi-unit block, is treated in similar way to the LV connection (no substation required) described in section 4.4 above. The second part, the reticulation within the block, is the responsibility of the developer.

Generally a multi-unit block the connection will pass the ICRT, so no capital contribution charges will apply to the connection assets (A), extension (B) and design and administration (C).

If a developer elects for ActewAGL Distribution to design and construct the reticulation system within the block, the cost of work will be quoted and charged to the developer. If the developer chooses to reticulate the block, they will do it at their own expense.

Some ancillary charges, for example relating to asset acceptance, may apply.

The pioneer scheme usually does not apply to this type of connection.

4.11 Multi-unit block (substation required)

For the treatment of connection of multi-unit blocks when a substation is required refer to section 4.10.

4.12 Extra large block reticulation (multi hectare blocks)

The charges relating to connection and reticulation of the extra large blocks are treated in the same way as reticulation of non typical subdivision estates (see section 4.9).

4.13 Embedded generators up to 30 kW (micro-generators)

(a) Connected as part of the basic connection

If the micro embedded generator is connected as part of a basic connection, the generator connection is made under the relevant MSO. No extensions or augmentation of the existing network are required and consequently there is no capital contribution. If a new meter or replacement meter is required for the generator connection, the customer will be charged a fixed fee for the provision of the compliant meter. A requirement for a new/replacement meter will depend on the existing meter installed on the premises and whether the generator participates in a net or gross feed-in-tariff or buy back scheme.

Similar treatment is extended to any micro generation connection which does not require changes to the existing network other than installation of metering.

Table 11: Breakdown of costs – typical installation of a micro-generator provided as part of a basic connection.

	Cost component	*Charge*	*Comment*
A	Premise connection assets	✓	No charge for the premise connection assets, however a charge for a new/replacement compliant meter may apply
B	Extension	+	Generally not relevant to basic connections
C	Design and administration	+	Generally not relevant to basic connections
D	Augmentation shared network	X	No charge.
E	Customer requirements above LCTAS connection and special connection requirements	+	Generally does not apply, but may apply in some circumstances.
F	Asset relocation and removal	+	Generally not relevant to basic generator connection
G	Other ancillary services	+	Some charges may apply depending on the scope of the job

(b) Not connected as part of a basic connection

If a connection requires modification to the network, the customer may be charged the cost of network modifications, as well as the cost of metering.

If the connection involves an embedded generator and a load, the capital contribution is based on the total incremental cost of the work. The relevant load for the purpose of the cost relating to the shared network is the gross peak demand of the load regardless of the generators expected output.

Generally the pioneer scheme does not apply to this type of connection.

Table 12: Breakdown of costs – typical installation of embedded micro generator which requires modifications to the existing network.

	Cost component	*Charge*	*Comment*
A	Premises connection assets	✓	Charges apply if changes to the connection assets are required. In addition a charge may apply for a new/replacement compliant meter (if applicable).
B	Extension	✓	Charges apply if extension of the network is required.
C	Design and administration	✓	Charges apply if connection contains a design and administration component
D	Augmentation shared network	+	Generally not relevant to the small generators. Generators cover the cost if augmentation required and the generator is the main beneficiary.
E	Customer requirements above LCTAS connection and special connection requirements	+	Generally does not apply, but may apply in some cases.
F	Asset relocation and removal	+	Generally not relevant to generator connections, but may be required in some cases.
G	Other ancillary services	+	Some charges may apply depending on requirements of the connection

4.14 Embedded generators 30 kW to 200 kW, 200 kW to 5 MW, and greater than 5 MW

These connections are provided outside the requirements of Chapter 5A of the NER. However they are included in this connection policy for completeness.

Often connection of the generator will require installation of connection assets, and network modifications – for example extensions or augmentations. While the treatment of the generators and the breakdown of the connection cost components are similar across the sizes of generators listed above, the scale of the connection works normally increases with the size of the embedded generator.

The pioneer scheme may apply, if the generator paid for network extension and the extension is subsequently (within 7 years) shared by another customer.

Table 13: Breakdown of costs – connection of embedded generator which requires connection assets, network extension and augmentation.

	Cost component	*Charge*	*Comment*
A	Premises connection assets	✓	Charges apply for new or modified connection assets.
B	Extension	✓	Charges apply for network extension.
C	Design and administration	✓	Charges apply.
D	Augmentation shared network	✓	Charges apply if augmentation is required and the generator is the main beneficiary of augmentation.
E	Customer requirements above LCTAS connection and special connection requirements	+	Generally does not apply, but may apply in some cases.
F	Asset relocation and removal	+	Generally not relevant to generator connections, but may be required in some cases.
G	Other ancillary services	+	Some charges may apply depending on requirements of the connection. For larger generator connections it is more likely that network technical enquiry and network study charges may apply. Contract negotiation charges may apply. Connections of this type may involve considerable design costs. An upfront design deposit may be requested before design commences.

4.15 Temporary connections

Temporary connections are usually required to provide electricity supply during construction. Temporary connections may also be required to provide electricity supply to special events.

The costs of providing a temporary connection are recovered from the customer. Standard and typical temporary connections are provided on the fixed fee basis. Larger construction projects may require larger capacity supply arrangement including a requirement for a temporary substation. These larger connections are charged on a quoted basis.

5 Financial guarantees

If ActewAGL Distribution fairly and reasonably assesses that there is a high risk that it may not earn the estimated incremental revenue from a connection applicant and, as a result, the incremental revenues will be less than the incremental costs of the connection, it may require a financial guarantee in the form of a bank guarantee.[18] A financial guarantee will generally only be required in relation to connections that are the subject of a negotiated offer, the cost of the connection funded by ActewAGL Distribution exceeds $200,000 and there is a significant difference between ActewAGL Distribution's and the customer's load forecasts.

A financial guarantee is a binding legal agreement between ActewAGL Distribution and the customer (which may be a real estate developer) where the customer guarantees to pay ActewAGL Distribution if the connection does not meet, within a specified period, the load required to make the incremental revenue equal to or greater than the incremental cost. The period will nominally be 5 years, although this can be varied on a case by case basis, depending on the nature of the risks involved.

The financial guarantee will be established at the time the connection offer is accepted and prior to the works commencing. The financial guarantee will be in the form of a bank guarantee provided by the customer, or other suitable financial instrument as agreed by ActewAGL Distribution. ActewAGL Distribution is entitled to withdraw from the bank guarantee any shortfall in actual targets, in accordance with the terms stated in the deed and the bank guarantee.

The amount of the financial guarantee will not be greater than the amount of the connection service charge that ActewAGL Distribution would have charged had it forecast incremental revenue using a low risk forecast of the load and adjusted for time cost of money.

Any payments made to ActewAGL Distribution under the financial guarantee scheme must correspond to a difference between the guaranteed load and the actual load. Depending on the type and characteristics of the load, it may be appropriate to assume that the load increases to a guaranteed level over a period of time – for example 1 to 2 years. If the load is below the guaranteed level in one year and exceeds the guaranteed level in another year, relevant over and under adjustments apply.

[18] The AER connection charge guidelines refer to financial guarantees as security fees. Chapter 5A of the Rules instead uses the term financial guarantee.

6 Pioneer scheme

Where a customer has made a capital contribution towards the cost of extension assets, then within the next 7 years if a subsequent customer connects to those extension assets, ActewAGL Distribution will, under the circumstances described below, refund part of the original customer's capital contribution. If the subsequent customer is required to pay a capital contribution toward the extension (as a result of the application of the ICRT) then that customer may also be required to make a contribution towards the refund to the original customer.

6.1 Method for calculating the amount of a refund under the Pioneer Scheme

1. Eligibility

To be eligible for a refund:

- the customer (including a real estate developer) must have paid connection charges for an extension asset installed to connect a single retail customer (including non-registered embedded generator or micro embedded generator).
- the customer is either the current occupier of a premise or the original occupier (which paid for, or for part of, an extension) of the premise. If there is a dispute between the current occupier and the original occupier of a premise as to who is eligible for a refund, if there is no written evidence of an agreement to the contrary, the current occupier of the premise shall be taken to be entitled to any refund.

A customer is ineligible if:

- ActewAGL Distribution built the extension to take a higher capacity than required by the original customer and the capacity required by the new customer (and other subsequent customers) is less than the amount of the additional higher capacity constructed.
- the customer is a real estate developer and paid only for the portion of the total cost attributable to the real estate developer.
- it is 7 or more years since the extension assets were originally installed.

2. Value of assets subject to the pioneer scheme

The value of the extension assets subject to the pioneer scheme (before depreciation) is given by:

$$H = I - J$$

Where: H is the value of the extension assets subject to the pioneer scheme before depreciation;

I is the amount paid by the original customer for the extension assets; and

J is the amount paid by the original customer for a higher standard or higher capacity than the least cost technically acceptable standard or capacity.

The value of assets subject to the pioneer scheme is given by:

K = HL

Where: K is the depreciated value of the assets subject to the pioneer scheme

L is the depreciation factor given by:

Where: L = M/N

M = is the remaining life of the assets (from date of commissioning) in days; and

N = the life of the assets in days (20 years).

3. Amount of the refund to the first customer

The amount of the refund is given by:

P = KQR

Where: P is the amount of the refund;

Q is the subsequent customer's share of the length of the extension asset and is given by:

Q = T/U

Where: T is the length of asset used by the subsequent customer; and

U is the length of the original asset.

R is the subsequent customer's share of the capacity of the extension asset and is given by:

R = S/(V+S)

Where: S is the capacity required by the subsequent customer; and

V is the capacity required by the original customer.

If the subsequent customer is required to pay a capital contribution as a result of the application on the ICRT(including the refund) and the total refund is over $1,000 ($ 2012), the that customer is to pay the refund to ActewAGL Distribution. If the refund is over $1,000 ($ 2012), ActewAGL Distribution will pay the refund to original customer.

4. Subsequent Refunds

For subsequent refunds, the assets subject to the pioneer scheme need to be recorded according to the ownership arrangements.

If a subsequent customer connects to the extension assets, the original customer will now hold two types of assets:

- Assets not shared, the value of which is given by: W= K(1-Q)
- Assets shared with the first customer, the value of which is given by: X = KQ(1-R)

The first customer to subsequently connect has assets which they share with the original owner, the value of which is given by "P", the amount of the refund.

When calculating a subsequent refund, the value of assets (W, X & P) must be depreciated. The depreciation factor applied to each of customer assets is given by:

Y = Z/M

Where Y is the depreciation factor;

Z is the remaining life of the asset (days) assuming original life of 20 years.

M is the remaining life of the asset (days) at the time of the previous refund.

The amount of the refund for each ownership component of the original asset is to be calculated as for the original asset described in step 3 above.

If the second subsequent customer is required to pay a capital contribution as a result of the application on the ICRT (including the refund) and the total refund is over $1,000 ($2012), the new customer is to pay the refund to ActewAGL Distribution. If the refund is over $1,000 ($2012), ActewAGL Distribution will pay the refund to the original customer and first subsequent customer and record the assets attributable to each customer.

7 Prepayments

For connections where the estimated connection charges are greater than $50,000, ActewAGL Distribution requires an advance payment of 50 per cent of the total charges and a bank guarantee for the balance. The bank guarantee is used as payment upon completion of the works. Alternative payment arrangements may apply, as set out in agreed terms between ActewAGL Distribution and the connection applicant.

Full prepayment is required, at the time of formal acceptance of the connection offer, for connections where the estimated connection charges are less than $50,000.

8 Definitions

Augmentation of a transmission or distribution system means work to enlarge the system or to increase its capacity to transmit or distribute electricity.

Brownfield or already serviced block new connection is a connection of a load on a block which is electrically serviced, but a new service has to be provided due to redevelopment or change in load.

Connection contract means a contract formed by the making and acceptance of a connection offer.

Connection offer means an offer by ActewAGL Distribution to enter into a connection contract with: (a) a retail customer; or (b) a real estate developer.

Connection policy means a document, approved as a connection policy by the AER under Chapter 6, Part E, of the NER setting out the circumstances in which connection charges are payable and the basis for determining the amount of such charges.

Connection service means either or both of the following: (a) a service relating to a new connection for premises; (b) a service relating to a connection alteration for premises.

Greenfield or unserviced block new connection refers to a connection of a load on a block which was not previously electrically serviced.

Embedded generator is a generator connected to the distribution network.

Extension means an augmentation that requires the connection of a power line or facility outside the present boundaries of the network owned, controlled or operated by ActewAGL Distribution.

HV customer connection is a load connection for which the linkage point(s) between the network assets and premise connection assets is at 11 kV or 22 kV.

Least Cost Technically Acceptable Standard (LCTAS) refers to the least cost service consistent with ActewAGL Distribution supply security and reliability standards. The LCTAS assumes typical site conditions and job characteristics for the particular category of connection.[19]

Linkage points mean points which define different parts of the electrical network. For example an extension relates to assets between a linkage point to the existing network on the upstream side and a linkage point to premises connection assets on the downstream side. The premises connection assets are normally linked to customer installation on the downstream side.

[19] The AER describes the least cost technically acceptable standard as "the cheapest connection method, including both material and labour costs that is consistent with industry practice and meets the requirements of any relevant legislation, guidelines or codes". See AER 2012, *Connection charge guidelines under Chapter 5A of the NER, Final decision*, June, p. 30.

Micro EG connection means a connection between an embedded generating unit and a distribution network of the kind contemplated by Australian Standard AS 4777 (Grid connection of energy systems via inverters).

Micro embedded generator means a retail customer who operates, or proposes to operate, an embedded generating unit for which a micro EG connection is appropriate.

Model standing offer means a document approved by the AER as a model standing offer to provide basic connection services (see clause 5A.B.3 of the NER) or as a model standing offer to provide standard connection services (see clause 5A.B.5 of the NER).

Premises connection assets means the components of a distribution system used to provide connection services.

Relevant ACT distribution determination means, for this version 1.0 of the connection policy, the AER's determination for ActewAGL Distribution for the transitional regulatory period 1 July 2014 to 30 June 2015.

Retail customer includes a non-registered embedded generator and a micro embedded generator.

Reticulation assets means electrical assets normally consisting of cables, substations and pillars/pits located between the upstream linkage point to the network and downstream linkage point to which customer connection assets will be connected (normally at a pit or a pillar).

9 Abbreviations

Term	Meaning
AER	Australian Energy Regulator
CT/VT	current transformer/voltage transformer
DUOS	distribution use of system
HV	high voltage
ICRT	incremental cost-revenue-test
kW	Kilowatt
kVA	kilovolt ampere
LCTAS	least cost technically acceptable solution
LV	Low voltage
MSO	Model standing offer
MVA	megavolt ampere
NER	National Electricity Rules
OH	overhead
UG	underground

10 Point of contact

For more information visit http://www.ActewAGL.com.au or call 131 493.

11 Disclaimer

While ActewAGL Distribution will periodically review this policy to account for the impact of any future changes to legislation or regulation, ActewAGL Distribution does not make any representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of this policy, or the information contained in it.

It is the customer's responsibility to ensure that the arrangements applicable to a specific connection are confirmed with ActewAGL Distribution at the time that an application to connect is made.

Attachment A: ActewAGL Distribution's connection services and ancillary services – AER classification and basis for charging

Table A1 shows ActewAGL Distribution's connection services and ancillary services[20], the AER's classification (standard control or alternative control) and the basis for charging. For standard control services the basis for charging is as set out in Chapter 3 of this policy, and for alternative control services the charge is either a fee (F) or on a quoted basis (Q), as approved by the AER in the relevant ACT distribution determination.

Table A1 shows existing services as well as those that are under consideration for introduction during the 2014-19 regulatory period to provide appropriate user pays price signals to customers. Table A2 below contains a description of those services from Table A1 which ActewAGL Distribution proposes to provide on a fixed fee basis for 2014/15.

Table A1: ActewAGL Distribution's services – AER classification and basis for charging

	Type of service	*AER classification*	*Basis for charging*
	Connection Services		
1	**Service Connections <=100 Amps (Note 1)**	**Standard**	Chapter 3
	New Service - Residential - UG Greenfield [Includes Meter Installation]	Standard	
	New Service - Residential - UG Brownfield [Front/Includes Meter Installation]	Standard	
	New Service - Residential - UG [Backspine/Includes Meter Installation]	Standard	
	New Service - Commercial/Industrial (<=100 Amps) - OH [Includes Meter Installation]	Standard	
	New Service - Commercial/Industrial (<=100 Amps) - UG [Front / Includes Meter Installation]	Standard	
	New Service - Commercial/Industrial (<=100 Amps) - [Backspine / Includes Meter Installation]	Standard	
	New Service - Unmetered – OH	Standard	

[20] Metering services are also included in the table. While not covered by Chapter 5A of the Rules and the AER connection charge guidelines, they may be required as part of the connection, and are therefore included here for completeness.

	Type of service	*AER classification*	*Basis for charging*
	New Service - Unmetered – UG	Standard	
2	**LV connections**	**Standard**	Chapter 3
	LV Connection (>100 Amps) substation required	Standard	
	LV Connection (>100 Amps) customer substation not required	Standard	
	LV connection – consumer mains	Standard	
3	**HV connection**	Standard	Chapter 3
	Connection (>100 Amps) HV customer	Standard	
4	**Subdivision estate reticulation**	Standard	Chapter 3
	Subdivision estate reticulation residential	Standard	
	Subdivision estate reticulation commercial	Standard	
	Extra large blocks reticulation (multi -hectare sites)	Standard	
5	**Multi occupant sites connection**	**Standard**	Chapter 3
	Multi-occupant sites residential or commercial – substation required	Standard	
	Multi-occupant sites residential or commercial – no substation required	Standard	
6	**Embedded generator connections**	**Standard**	**Chapter 3**
	Embedded generator connection =< 30 kW (which is part of the basic connection).	Standard	
	Embedded generator connection =<30 kW (which is not part of the basic connection)	Standard	
	Embedded generator connection > 30 kW and =<200 kW	Standard	
	Embedded generator connection > 200 kW and < 5 MW	Standard	
	Embedded generator connection => 5MWs	Standard	
Ancillary services			
7	**Network technical enquiries, studies and negotiations (See comments at end of this table)**	**Alternative**	
	Network technical enquiry (Note 2)	Alternative	F or Q
	Network capability assessment (Note 2)	Alternative	F or Q
	Network technical studies (Note 2)	Alternative	F or Q
	Connection design deposit (Note 3)	Alternative	Q
	Connection enquiry (LV connection)	Alternative	F

	Type of service	*AER classification*	*Basis for charging*
	Connection enquiry (HV connection)	Alternative	F
	Negotiated connection offer negotiation charge	Alternative	Q
	Negotiated customer contract negotiation fee	Alternative	Q
8	**Asset relocations, removals, isolation and disconnections (Note 4)**		
8.1	**Service Relocations (<=100 Amps)**		
	Residential Service Relocation - OH to OH	Alternative	F or Q
	Residential Service Relocation - OH to OH [2 moves]	Alternative	F or Q
	Residential Service Relocation - OH to UG	Alternative	F or Q
	Residential Service Relocation - UG to UG [Front]	Alternative	F or Q
	Residential Service Relocation - UG to UG [Backspine]	Alternative	F or Q
	Residential Service Relocation - UG to OH [Front]	Alternative	F or Q
	Residential Service Relocation - UG to OH [Backspine]	Alternative	F or Q
8.2	**Disconnection for Demolition/Removal (<=100 Amps)**	**Alternative**	
	Disconnection – OH	Alternative	F
	Disconnection - OH to Temporary	Alternative	F
	Disconnection – UG	Alternative	F
	Disconnection - UG to Temporary	Alternative	F
	Disconnection – UGT	Alternative	F
	Disconnection - UGT to Temporary	Alternative	F
	Network Isolation - HV	Alternative	F or Q
	Network Isolation - LV	Alternative	F or Q
	Network Isolation & Drop - LV	Alternative	F or Q
	Network Isolation & Drop - HV	Alternative	F or Q
	UG Service / Meter Box Isolation < 100 Amps	Alternative	F or Q
	Service / MSB Isolation > 100 Amps	Alternative	F or Q
	OH Service / MSB Isolation & Drop > 100 Amps	Alternative	F or Q
	OH Service / Meter Box Isolation & Drop < 100 Amps	Alternative	F or Q
8.3	**Other assets relocations and removals (customer request)**	**Alternative**	**F or Q**
9	**Service Upgrades (when the block is already serviced)**	**Alternative**	
	Service 1 Phase to 3 Phase Upgrade - OH [No Cable Change required]	Alternative	F

	Type of service	*AER classification*	*Basis for charging*
	Service 1 Phase to 3 Phase Upgrade - OH [Service Cable Change Required]	Alternative	F or Q
	Service 1 Phase to 3 Phase Upgrade - UG [No Cable Change required]	Alternative	F
	Service 1 Phase to 3 Phase Upgrade - UG [Cable Change Required]	Alternative	F or Q
10	**Temporary Supplies**	**Alternative**	
	Temporary Supply Connections (<=100 Amps)	Alternative	F or Q
	Temporary Supply – OH	Alternative	F or Q
	Temporary Supply – UG	Alternative	F or Q
	Temporary Supply - UG (permanent location)	Alternative	F
	Other temporary supplies (e.g. for complex projects)	Alternative	Q
11	**Metering**		
	Off-Peak Metering (type 5 – type 6)	Alternative	F
	New Type 5 - 7 meter installation	Alternative	F
	Meter upgrade requested by the customer	Alternative	F
	Meter replacement due to faulty meter	Standard	No charge
12	**Miscellaneous charges**	**Alternative**	
	Consumer Mains Terminations - Substation	Alternative	F or Q
	Consumer Mains Terminations - Pillar/Cubicle	Alternative	F or Q
	Tiger Tails - LV Service	Alternative	F or Q
	Tiger Tails - LV Mains	Alternative	F or Q
	Tiger Tails - HV Mains	Alternative	F or Q
	Warning Flags - HV Mains	Alternative	F or Q
	Substation/Network Asset Access Supervision	Alternative	F or Q
	Network data provision – moderate	Alternative	F
	Network data provision – large	Alternative	F or Q
	Re-commissioning of asset	Alternative	F or Q
	Asset acceptance	Alternative	F or Q
	Re-scheduled visit (eg. when the site is obstructed or non - compliant)	Alternative	F or Q
	Issue copies of electrical drawings	Alternative	F or Q

	Type of service	*AER classification*	*Basis for charging*
	Underground boring under the driveway	Alternative	F
	Underground boring under the footpath	Alternative	F
13	**Retail Customer Services**		
	Premise Re-Energisation - after hours	Alternative	F
	Premise Re-Energisation - business hours	Alternative	F
	Premise De-Energisation - business hours	Alternative	F
	Premise De-Energisation - non-payment	Alternative	F
	Paid Meter Upgrade / Replacement [Upgrade to TOU]	Alternative	F
	Paid Meter Test	Alternative	F
	Special Meter Reading	Alternative	F
	Field visit only (de-energise site for non payment)	Alternative	F
	Single Premise No/Part Supply Response & Investigation	Alternative	No charge

Note 1: Some components of connection work in brownfield areas are charged on a fixed fee basis (see items 526, 527 and 528 in Table A2 below).

Note 2: The fee may apply to connections or connection enquiries which require network studies. Specific fee based charges apply to various size connections of load and embedded generation. For more complex unusual projects a quote or hourly rate is provided.

Note 3: The deposit (7% to 10% of the project cost) is levied prior to the detailed design work on the project commences. The deposit is charged for projects which require considerable design effort in early stages of the project, but there is a risk of the project not going ahead.

Note 4: Standalone asset relocations and removals (for example a request by the customer to relocate a pole) not related to connections are not covered by Chapter 5A of the NER. However, the cost of relocations/removals is included in the connection charges if assets are relocated/removed as part of connection works.

Network technical enquiry/studies charges and design deposits

A network technical study is usually required for a major new connection or a more complex project. The study identifies:

- the preferred option for system augmentation and connection
- the costs for design
- estimated costs for construction for the work to be undertaken.

This is usually an iterative process where the customer considers various load connection options and scenarios and information and feedback are exchanged multiple times between the customer and ActewAGL Distribution before the selection of the preferred connection. Network

technical enquiry and studies charges are levied either on a fixed fee basis in accordance with the AER approved ancillary charges or a quotation basis for more complex enquiries/studies.

If a connection requires significant design effort early in the process and, in the assessment of ActewAGL Distribution, there is a significant risk of the connection not going ahead, ActewAGL Distribution may request a design deposit which will be offset against any other charges if the connection goes ahead.

Table A2 below contains a description of those services from Table A1 which ActewAGL Distribution proposes to provide on a fixed fee basis for 2014/15. The fees will be as approved by the AER in the relevant distribution determination and published on ActewAGL's website by 1 July 2014. The codes in the left hand column correspond to the codes used in the schedule of proposed fees submitted to the AER in January 2014, as part of the transitional regulatory proposal for the 2014/15 transitional regulatory period.

Table A2: Ancillary Services Charged on the Fixed Fee Basis Proposed for 2014/15

Code	*Service*	*Service Description / Scope*
501	Re-energise premise – Business Hours	Re-energisation of a premise that is already connected to the network during business hours
502	Re-energise premise – After Hours	Re-energisation of a premise that is already connected to the network during after-hours periods
503	De-energise premise – Business Hours	De-energisation of a premise that is already connected to the network during business hours; excluding where the de-energisation is for debt non-payment
505	De-energise premise for debt non-payment	De-energisation of a premise that is already connected to the network where the de-energisation is for debt non-payment – Anytime
507	Install Interval Meter	Installation of an interval meter (Type 5) on customer request during business hours
509	Install / Replace Meter – Micro Renewable Energy Installation	Installation of additional Type 6 meter or replacement of existing Type 6 meter during business hours to facilitate connection of a Micro Renewable Energy Installation
504	Meter Test (Whole Current) – Business Hours	Meter test for whole current Type 5 – 7 meters only during business hours Fee is refunded if the meter is proven to be faulty
510	Meter Test (CT/VT) – Business Hours	Meter test for meters utilising a CT or VT during business hours Fee is refunded if the meter installation is proven to be faulty

Code	Service	Service Description / Scope
506	Special Meter Read	Out of cycle meter read during business hours Use for the following: • Customer Initiated Check Read, • Data validation initiated Check Read - prior to billing, • Data validation Check Read - post billing • Customer initiated additional out-of cycle read for billing purposes • Final read Fee associated with a Check Read is refunded if the original reading is proven to be incorrect
520	Temporary Builders Supply – Overhead (Business Hours)	Installation of a new temporary overhead supply connection including associated metering during business hours; where the service connection complies with the following: • Load is <= 100 Amps/Phase • Single or multi-phase • Meter location <= 25m from source network pole • Point of Attachment/Builders Pole supplied and installed by the customer Includes situations where the service connection point of attachment (POA) and meter are in the permanent location
522	Temporary Builders Supply – Underground (Business Hours)	Installation of a new temporary underground supply connection including associated metering during business hours; where the service connection complies with the following: • Load is <= 100 Amps/Phase • Single or multi-phase • Meter location <= 15m from source network pole / pillar / pit / cable end • Conduit between meter location and network connection point supplied and installed by the customer Includes situations where the service connection point of entry (POE) and/or meter are in the permanent location
523	New Underground Service Connection – Greenfield	Installation of a new underground service connection, including associated metering, during business hours where the service connection complies with the following: • Service connection is the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Network connection point is located in the street frontage verge • Cable length within block <= 15m • Conduit between the POE/meter location (as applicable) and the property boundary is supplied and installed by the customer • Complete service connection including associated metering can be undertaken in a single visit

Code	Service	Service Description / Scope
524	New Underground Service Connection – Greenfield Cable Only	Installation of the ***cable component only*** of a new underground service connection, at the customer's specific request, during business hours where the service connection complies with the following: • Service connection is the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Network connection point is located in the street frontage verge • Cable length within block <= 15m • Conduit between the POE/meter location (as applicable) and the property boundary is supplied and installed by the customer Use where the customer requires the cable installed for site logistical reasons and is not ready for the metering and final supply connection Customer will be required to submit a new and separate request for the subsequent installation of the metering and final supply connection when the site is ready.
525	New Underground Service Connection – Greenfield Metering Only	Installation of the ***metering component only*** of a new underground service connection, at the customer's specific request, during business hours where the service connection complies with the following: • Service connection is the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • The underground cable has already been installed through a previous customer application. New Underground Service Connection – Greenfield Cable Only Use where the customer has previously requested a New Underground Service Connection – Greenfield Cable Only for site logistical reasons and now requires the metering and final supply connection
526	New Overhead Service Connection – Brownfield (Business Hours)	Installation of a new overhead service connection, including associated metering, during business hours; where the service connection complies with the following: • Service connection is not the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Service connection is continuous with a length <= 2 spans &/or 25m from source network pole Typically use in redevelopment scenario only where an underground service connection cannot be achieved.

Code	Service	Service Description / Scope
527	New Underground Service Connection – Brownfield from Front	Installation of an underground service connection, including associated metering, during business hours where the service connection complies with the following: • Service connection is not the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Service connection is continuous with a length <= 25m from network connection point • Network connection point is a pole, pillar or pit located in the street frontage verge • Conduit between the POE/meter location (as applicable) and the network connection point or property boundary is supplied and installed by the customer Where the service connection extends outside the customer property and ActewAGL Distribution is required to undertake additional civil works, fees may apply for the additional work beyond the scope of this item Typically use in redevelopment scenarios such as knockdown/rebuilds and/or dual occupancy premises.
528	New Underground Service Connection – Brownfield from Rear	Installation of an underground service connection, including associated metering, during business hours where the service connection complies with the following: • Service connection is not the first / initial connection to that block/premise • Load is <= 100 Amps/Phase • Single or multi-phase • Service connection is continuous with a length <= 25m from network connection point • Network connection point is a pole located in the section backspine • Conduit between the POE/meter location (as applicable) and the network connection point or property boundary is supplied and installed by the customer Where the service connection extends outside the customer property and ActewAGL Distribution is required to undertake additional civil works, fees may apply for the additional work beyond the scope of this item Typically use in redevelopment scenarios such as knockdown/rebuilds and/or dual occupancy premises.
541	Overhead Service Relocation – Single Visit (Business Hours)	Relocation of an overhead service connection in a single site visit during business hours where the service connection complies with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Service connection is no more than two spans &/or 25m in length Scope involves: • De-energisation, physical disconnection / dismantling then re-attachment, connection and re-energisation • Replacement of overhead service cable if required

Code	Service	Service Description / Scope
542	Overhead Service Relocation – Two Visits (Business Hours)	Relocation of an overhead service connection in two site visits during business hours where the service connection complies with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Service connection is no more than two spans &/or 25m in length Scope involves: • De-energisation, physical disconnection / dismantling in first site visit • Re-attachment, connection and re-energisation in second visit • Replacement of overhead service cable if required
543	Overhead Service Upgrade – Service Cable Replacement Not Required	Upgrade of an existing overhead service connection from single to multi-phase where the installed cable does not require replacement and the service connection complies with the following: • Load <= 100 Amps/Phase • Existing cable is physically able to be connected multi-phase without joints
544	Overhead Service Upgrade – Service Cable Replacement Required	Upgrade of an existing overhead service connection where the installed cable does not meet the increased load requirements (multi-phase or capacity/rating) and the service connection complies with the following: • Load <= 100 Amps/Phase • Service connection is no more than two spans &/or 25m in length Use for single to multi-phase and capacity upgrades
545	Underground Service Upgrade – Service Cable Replacement Not Required	Upgrade of an existing underground service connection from single to multi-phase where the installed cable does not require replacement and the service connection complies with the following: • Load <= 100 Amps/Phase • Existing cable is physically able to be connected multi-phase without joints
546	Underground Service Upgrade – Service Cable Replacement Required	Upgrade of an existing underground service connection where the existing cable does not meet the increased load requirements (multi-phase or capacity/rating) and the service connection complies with the following: • Load <= 100 Amps/Phase • Service connection is no more than 25m in length • Conduit between the meter location and the network connection point or property boundary is supplied and installed by the customer Where the service connection extends outside the customer property and ActewAGL Distribution is required to undertake additional civil works, fees may apply for the additional work outside the scope of this item

Code	Service	Service Description / Scope
547	Underground Service Relocation – Single Visit (Business Hours)	Relocation of an underground service connection, or part thereof, in a single site visit during business hours where the service connection complies with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Service connection is no more than 25m in length Scope involves: • De-energisation, physical disconnection/cutting away, installation of new service cable section, jointing and then termination, connection and re-energisation Where the service connection extends outside the customer property and ActewAGL Distribution is required to undertake additional civil works, fees may apply for the additional work outside the scope of this item
548	Install surface mounted point of entry (POE) box	Installation of a surface mounted point of entry box and conduit to ground level on the customer's structure to facilitate installation of a new or relocated underground service connection; where the service connection complies with the following: • Load <= 100 Amps/Phase • Single or multi-phase Scope involves: • Supply and installation of POE box, conduit and associated fixings Applicable where a recessed POE box cannot be provided by the customer Only use in conjunction with Item 526 New Underground Service – Brownfield and Item 547 Underground Service Relocation
560	Temporary de-energisation – LV (Business Hours)	Temporary de-energisation and re-energisation of LV network infrastructure in business hours to allow safe customer / contractor approach and work in close proximity Scope does not include dismantling of lines or network infrastructure Use for tree pruning, mobile plant operation, oversize loads, construction activities
561	Temporary de-energisation – HV (Business Hours)	Temporary de-energisation and re-energisation of HV network infrastructure in business hours to allow safe customer / contractor approach and work in close proximity Scope does not include dismantling of lines or network infrastructure Use for tree pruning, mobile plant operation, oversize loads, construction activities

Code	Service	Service Description / Scope
562	Supply Abolishment / Removal – Overhead (Business Hours)	Decommissioning and removal of an overhead service connection and associated metering during business hours for service connections that comply with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Service connection is no more than two spans &/or 25m in length • Removal of the service connection does not result in a consequential requirement to remove a network pole Use where a property is to be demolished, supply is no longer required, an alternative connection point is to be established / used, or a redundant supply is to be removed.
563	Supply Abolishment / Removal - Underground (Business Hours)	Decommissioning and removal of an underground service connection and associated metering during business hours for service connections which comply with the following: • Load <= 100 Amps/Phase • Single or multi-phase • Removal of the service connection does not result in a consequential requirement to remove redundant network mains infrastructure such as a pole, pillar, pit Use where a property is to be demolished, supply is no longer required, an alternative connection point is to be established / used, or a redundant supply is to be removed.
564	Install & Remove Tiger Tails – Establishment (Business Hours)	Installation and removal of "Tiger Tail" covers on overhead lines including service lines, LV & HV during business hours – Establishment fee per site Use in conjunction with Item 565 to determine total service charge
565	Install & Remove Tiger Tails - Per Span (Business Hours)	Installation and removal of "Tiger Tail" covers on overhead lines including service lines, LV & HV during business hours – Length based fee Use in conjunction with Item 564 to determine total service charge
566	Install & Remove Warning Flags – Installation (Business Hours)	Installation and removal of Warning Flags on overhead lines including service lines, LV & HV during business hours – Establishment fee per site Use in conjunction with Item 567 to determine total service charge
567	Install & Remove Tiger Tails - Per Span (Business Hours)	Installation and removal of Warning Flags on overhead lines including service lines, LV & HV – Lengths based fee Use in conjunction with Item 566 to determine total service charge
568	Small Embedded Generation OPEX Fees - Connection Assets	Annual operational and maintenance charges for the dedicated connections assets of small embedded generators (other than residential)
569	Small Embedded Generation OPEX Fees - Shared Network Asset	Annual operational and maintenance charges for the shared network assets associated with small embedded generators (other than residential)

Code	Service	Service Description / Scope
570	PV Connection Enquiry – LV Class 1 (<= 10kW Single Phase / 30kW Three Phase)	Receipt, registration, processing and responding to a connection enquiry for an LV network connection of a Class 1 PV installation with a nameplate rating <= 10kW single phase / 30kW three phase
571	PV Connection Enquiry – LV Class 2 to 5 (> 30kW <= 1500kW Three Phase	Receipt, registration, processing and responding to a connection enquiry for an LV network connection of a Class 2 - 5 PV installation with a nameplate rating > 30kW single phase and <= 1500kW three phase
572	PV Connection Enquiry – HV	Receipt, registration, processing and responding to a connection enquiry for a HV network connection of a PV installation of any size
573	Provision of data for network technical study for large scale installations	Network technical study, including the provision of network data and an analysis of the results of the study. Initial payment before work proceeds. **(See:** http://www.actewagl.com.au/~/media/ActewAGL/ActewAGL-Files/Products-and-services/Building-and-renovation/For-professionals/CCA0212-48%20guidelines-NoContacts.ashx)
574	Design & Investigation - LV Connection Class 1 PV (<= 10kW Single Phase / 30kW Three Phase)	Network design & investigation / analysis services for an LV network connection of a Class 1 PV installation with a nameplate rating <= 10kW single phase / 30kW three phase.
575	Design & Investigation - LV Connection Class 2 PV (> 30kW and <= 60kW Three Phase)	Network design & investigation / analysis services for an LV network connection of a Class 2 PV installation with a nameplate rating > 30kW and <= 60kW three phase.
576	Design & Investigation - LV Connection Class 3 PV (> 60 kW and <= 120kW Three Phase)	Network design & investigation / analysis services for an LV network connection of a Class 3 PV installations with a nameplate rating > 60kW and <= 120kW three phase.
577	Design & Investigation - LV Connection Class 4 PV (> 120 kW and <= 200kW Three Phase)	Network design & investigation / analysis services for an LV network connection of a Class 4 PV installation with a nameplate rating > 120kW and <= 200kW three phase.
578	Design & Investigation - LV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – ActewAGL Network Study	Network design & investigation / analysis services for an LV network connection of a Class 5 PV installation with a nameplate rating > 200kW and <= 1500kW three phase where ActewAGL undertakes the network study.

Code	Service	Service Description / Scope
579	Design & Investigation - HV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – Customer Network Study	Network design & investigation / analysis services for an HV network connection of a Class 5 PV installation with a nameplate rating > 200kW and <= 1500kW three phase where ActewAGL provides the requisite network data and the customer undertakes the network study.
590	Rescheduled Site Visit – One Person	Wasted site visit for a one person team where the service was not able to be completed on attendance. Includes customer cancellations before the work is completed, Officer unable to access site to complete service on arrival, site not ready for service requested on arrival, site unsafe &/or installation defect prevents service being undertaken or completed including non-compliance with ActewAGL Standards and/or Service & Installation Rules
591	Rescheduled Site Visit – Service Team	Wasted site visit for a Services Team where the service was not able to be completed on attendance. Includes customer cancellations before the work is completed, Team unable to access site to complete service on arrival, site not ready for service requested on arrival, site unsafe &/or installation defect prevents service being undertaken or completed including non-compliance with ActewAGL Standards and/or Service & installation Rules

Attachment B: Incremental cost-revenue-test (ICRT)

ActewAGL Distribution applies an incremental cost-revenue-test (ICRT) to determine the capital contributions that may apply to connection services that the AER has classified as standard control services.

Under the ICRT, ActewAGL Distribution may seek a capital contribution (CC) for standard control connection services from a connection applicant, if the incremental cost of the standard control connection services exceeds the estimated incremental revenue expected to be derived from the standard control connection services (IR(n=X)). The incremental cost includes the customer specific connection costs (ICCS) (including costs of extensions and augmentation of premises connection assets at the connection point) and any shared network costs (ICSN) (including costs of augmentation, insofar as it involves more than an extension, attributable to the customer's connection). The ICRT is as follows:

$$CC = ICCS + ICSN - IR(n=X)$$

Where $CC \geq 0$

ICCS = Incremental Cost Customer Specific—the incremental costs incurred by the distribution network service provider for standard control connection services, which are used solely by the connection applicant. This may include extensions and augmentation of premises connection assets at the retail customer's connection point. The ICCS may include costs for: augmentation of premises connection assets at the retail customer's connection point; extension costs; administration costs (including any design and certification costs); and any costs for conducting a tender process. Table 2 in Chapter 2 of this policy provides further details on each of these cost components.

The ICCS will be calculated in accordance with clauses 5.2.1 to 5.2.4 of the AER connection charge guidelines. For connection upgrades and alterations only incremental costs and revenue are taken into account (the cost of the connection upgrade/alteration is compared against the incremental revenue). Only simple high volume types of service upgrades (for example single dwelling) are alternative control.

ICSN = Incremental Cost Shared Network—the costs incurred by ActewAGL Distribution for standard control connection services, which are not used solely by the connection applicant. This may include any augmentation (insofar as it involves more than an extension) attributable to the new connection.

The ICSN will be calculated in accordance with clauses 5.2.1 to 5.2.3 and clauses 5.2.5 to 5.2.11 of the AER connection charge guidelines. As explained in Chapters 3 and 4 of this policy, as a general principle the ICSN term will be zero. However a $/kVA charge designed as a price signal in relation to augmentation of shared network assets applies to connections larger than 100 Amps per phase. The charge is applied to customers and developers including subdivision estate developers.

IR(n=X) = Incremental revenue expected to be received from the new connection—the present value of a X year revenue stream directly attributable to the new connection as described in section 5.3 of the AER connection charge guidelines. X is assumed to be 30 years for residential connections, and 15 years for commercial, unless otherwise agreed by the applicant and ActewAGL Distribution.

The revenue calculation is based on the Distribution Use of System (DUOS) tariff corresponding to the customer category (residential, LV commercial and HV commercial), as determined by the AER in the relevant distribution determination.

The estimates of demand and energy consumption are prepared with reference to existing similar loads taking into account the particular circumstances and load characteristics such as seasonality, load consumption curves, load factors and power factors. In addition, where relevant, the estimates take into account the following:

- For subdivision estates, in particular commercial estates, demand per square metre of land area.
- For residential load including subdivision estates and multi-unit blocks, existing and projected per dwelling energy consumption figures.
- For commercial load, demand and energy consumption per meter of the gross, or if more appropriate net, building floor area.
- For unusual loads, information specific to the connection needs to be obtained from the connection applicant to allow for a bottom-up method estimate of consumption.

To ensure that the estimated revenues and costs are directly comparable, only DUOS tariff components corresponding to asset cost and operational costs relevant to the connection are included in the calculation, consistent with ActewAGL Distribution's cost of service model, and the AER connection charge guideline (clause 5.1.5).

The revenue stream is discounted using the real pre-tax weighted average cost of capital (WACC), as set out in the relevant ACT distribution determination[21], consistent with clause 5.3.4 of the AER connection charge guideline.

The assumed price path for calculating the incremental revenue is as specified in the AER connection guideline (clause 5.3.5):

(a) use the price path set out in the relevant distribution determination that is applicable at the time of the connection offer, until the end of the relevant distribution determination, and

[21] The WACC determined by the AER in the transitional distribution determination will apply for calculations made in 2014/15 (the transitional regulatory period), and the WACC determined in the subsequent distribution determination will apply for calculations made from 2015/16 to 2018/19 (the subsequent regulatory period).

(b) use a flat real price path[22] after the end of the relevant distribution determination, for the remaining life of the connection. This flat price path is the expected real DUoS charges in the final year of the regulatory control period.

The following incremental cost components of connection (items A to G from Table 2 in Chapter 2) are taken into account when applying the ICRT:

(a) For load customers the revenue is compared against the cost of standard components of premises connection assets (A), extensions (B) and design and administration (C)

(b) For subdivision estate reticulation the cost of reticulation assets (A) and design and administration (C). As indicated in Chapter 4, the cost of extension (ie. headworks) is taken into account only for some estates meeting defined criteria.

(c) For internal reticulation of the extra large multi hectare blocks, the treatment is the same as for (b) above.

(d) For embedded generator connections other than or micro generators (<30 kW) connected as part of a basic connection, the cost components included in ICRT are connection assets (A), extensions (B) and design and administration (C) and augmentation of shared network assets (D).

[22] This is equivalent to being escalated by CPI in nominal terms

Attachment G2 to Transitional Regulatory Proposal 2014/15

Model Standing Offer for basic connection services

Applies to retail customers who are Micro-embedded generators

Effective from 1 July 2014

Preamble

This document is ActewAGL Distribution's *model standing offer* to provide *basic connection services* to *retail customers* who are *micro-embedded generators*.

ActewAGL Distribution ABN 76 670 568 688 is a partnership of ACTEW Distribution Ltd ABN 83 073 025 224 and Jemena Networks (ACT) Pty Ltd ABN 24 008552 663 and is referred to in this *model standing offer* as "we", "our" or "us").

Terms italicised in this document are defined in clause 16. In the event of an inconsistency between a term defined in this offer and the *National Electricity Rules*, the meaning in the *National Electricity Rules* is to prevail.

If accepted by the *retail customer*, this document becomes the *connection contract* between us and *the retail customer* for the provision of *connection services*. On acceptance of the *model standing offer*, references to "*model standing offer"* should be taken to be references to *"connection contract"*.

1. Who does this offer apply to?

This offer applies to *retail customers* or persons acting on behalf of *retail customers* (in this contract, a reference to a *retail customer* includes a reference to a person acting on a *retail customer's* behalf) who are *micro-embedded generators*. If the *retail customer* is not a *micro-embedded generator*, we have a separate *model standing offer* that applies.

2. What services are covered by this offer?

This offer applies to *basic connection services* provided by us.

A *basic connection service* is a *connection service* that:

(a) relates to a physical link between our distribution system and a *retail customer*'s *premises* which allows the flow of electricity (a *connection*);

(b) involves either:

  (i) an alteration to an existing *connection* including an addition, upgrade, extension, expansion, *augmentation* or any other kind of alteration (a *connection alteration*);

  (ii) the establishment of a *connection* where there is no existing connection (a *new connection*); and

(c) involves minimal or no *augmentation* of our *distribution network*.

The type of connection covered by this offer is detailed in Attachment 1.

All assets provided under this *model standing offer* are our property.

This offer does not:

(a) in any way constitute an offer to supply or sell electricity to the *retail customer* or to buy electricity from the *retail customer*;

(b) provide for *supply services* including the energisation or de-energisation of the *premises*

(c) cover work to be completed by the *retail customer* which must be completed prior to us completing the work under this *model standing offer*;

(d) cover:

(i) the installation of conduits;

(ii) civil works;

(iii) removal of vegetation;

(iv) obtaining dial-before you dig asset clearances for customer installations;

(v) arranging inspection of electrical works installed by the *retail customer*;

(vi) supply and installation of the point of entry cubicle;

(vii) termination of consumer mains.

3. How to accept this offer

3.1. General

(a) If the *retail customer* would like to accept this offer, the *retail customer* must complete our application for a *basic connection service* which is available on our website.

(b) Unless we agree a different timeframe with the *retail customer* or the customer applies for an *expedited connection* (see clause 3.2) we will within 10 business days of receiving a completed application:

(i) advise the *retail customer* whether the proposed *connection service* is a *basic connection service*; and

(ii) if we are satisfied that the application is for a *basic connection service*, make a *connection offer* which will be consistent with this *model standing offer*.

(c) The *connection offer* will remain open for acceptance for 45 business days from the date of the offer and if not accepted within that period, it will

lapse unless the period is extended by agreement between us and the *retail customer*.

3.2. Expedited connection

(a) An *expedited connection* involves the *retail customer* and us entering into a *connection contract* on the terms of this *model standing offer* when we receive the customer's application for *basic connection services*.

(b) The *retail customer* may apply for an *expedited connection* in relation to a *basic connection service* if it falls within the terms of this *model standing offer* by electing an *expedited connection* on the application for *basic connection services*.

(c) If we are satisfied that the connection application is for *basic connection services* that fall within the terms of this *model standing offer* and the customer has elected an *expedited connection*, a *connection contract* is formed between us and the *retail customer* on the terms of the *model standing offer*.

(d) If we do not agree that an offer in terms of this *model standing offer* or any other *model standing offer* is appropriate for the *retail customer,* we will notify the *retail customer* accordingly.

3.3. Negotiated connection offer

(a) A *retail customer* may decide not to accept this *model standing offer* and instead negotiate a *negotiated connection contract* with us for *connection services* or both *connection services* and *supply services.*

(b) We may charge a reasonable fee to cover expenses directly and reasonably incurred by us in assessing any application for a *negotiated connection contract*

4. What are the timeframes for commencing and completing the connection service work?

(a) Attachment 2 sets out the timeframes within which we will commence and complete the *connection service* work. We will use our best endeavours to ensure that the *connection service* work is carried out within the applicable timeframes.

However, we are not required to commence or continue with *connection service* work if the *retail customer* fails to comply with conditions of this offer that must be complied with by the *retail customer*.

(b) The timeframes for commencing the work are subject to the following conditions:

(i) all information provided by the *retail customer* including any further information requested by us is accurate and complete;

(ii) approval has been granted by the relevant person or entity for any vegetation clearing required by us and the vegetation has been cleared;

(iii) all *connection works* to be supplied by the *retail customer* have been completed to the satisfaction of our design officer;

(iv) where the *retail customer* is required to complete certain works prior to us completing our *connection service work*, the completion of those works;

(c) The timeframes for commencing and completing the *connection* works do not take into account factors outside of our control which may affect these timeframes. If such factors do arise, reasonable delay must be taken into account in those timeframes. We will advise you as soon as practicable of the nature and timing of the delay. Factors outside of our control include:

(i) weather;

(ii) the presence of a condemned or nailed pole on the *premises* that prevents or delays the required work from being undertaken;

(iii) access for service vehicles and plant being restricted or obstructed;

(iv) the presence on the *premises* of rock, other underground obstructions or physical land characteristics that could not have been foreseen by us and not allowed for in the offer;

(v) the presence on the *premises* of other underground services not anticipated by us;

(vi) works not being completed to a sufficient standard, for example: non-compliant *meter* box or unauthorised deviations from the service marking;

(vii) non-compliant *connection* works; and

(viii) any delays required to comply with local laws and regulations.

(d) If the *retail customer* does not allow us to commence the *connection service* work within 6 months of the commencement of the *connection contract* or does not otherwise allow us to complete the work within 6 months of commencement of the *connection service* work, we may, at our discretion, do any or all of the following:

(i) review the terms of the *connection contract*;

(ii) terminate the *connection contract*;

(iii) make a revised *connection offer.*

5. What are the safety and technical requirements?

5.1. General

(a) The *retail customer* must comply with our *Service and Installation Rules*, any relevant ActewAGL standards and applicable *regulatory requirements*.

(b) The *retail customer* must provide and maintain at the *premises* any reasonable or agreed facility required by us.

(c) In some circumstances, we may require that the *retail customer*'s electrical contractor be on the *premises*. We will inform the *retail customer* when these circumstances arise and the *retail customer* will be responsible for arranging the contractor's attendance and any costs associated with this attendance.

(d) All property boundaries must be clearly marked. In the absence of any identifiable boundary marks in relation to residential areas, the presence of a fence will be taken to be the property boundary. We accept no liability for errors and omissions arising from an incorrectly marked boundary or the absence of a boundary marking.

(e) The *retail customer* must maintain the required clearance of new assets from aerial lines as required by the applicable *regulatory requirements*. If the *retail customer* does not maintain the required clearance, we may undertake this work and may charge the *retail customer* in accordance with clause 7 and Attachment 3

5.2. Works completed by the retail customer

(a) The *retail customer* must ensure that all works completed by or on behalf of the *retail customer* are compliant with the *regulatory requirements*. Where works are non-compliant, we will issue a notice to the *retail customer* (a **non-compliance notice**). The *retail customer* must organise for the non-compliance to be rectified and notify us when the rectification has taken place.

(b) Where the *retail customer* completes any work in relation to the *premises* which is required to be inspected by third parties, including regulatory bodies or statutory authorities, the *retail customer* must organise and ensure the completion of these inspections prior to us commencing work. If we have to revisit the *premises* because these inspections have not been carried out, we may charge the *retail customer* in accordance with clause 7 and Attachment 3 in relation to the revisit.

5.3. Protection of our distribution network

(a) The *retail customer* must:

(i) use reasonable endeavours to protect our equipment and the *meter* installed on your *premises* from unauthorised interference;

(ii) notify us of any interference, defect or damage within 5 *business days* of becoming aware of it.

(iii) pay the reasonable costs of repair or replacement of our equipment installed on their *premises,* on request, if the defect or damage was caused by the *retail customer* or by another person in circumstances where the *retail customer* failed to take reasonable care to prevent that;

(iv) not do anything that interferes with the safe or efficient operation of our *distribution network* or permit anyone else to do so.

(b) If we reasonably consider that the *retail customer's connection* or any of the customers equipment is having an adverse effect on the *distribution network*, the *retail customer* must comply with any reasonable directions we give the customer to correct that interference or effect.

(c) The *retail customer* acknowledges that failure to comply with their obligations in paragraphs (a) and (b) may result in a safety hazard for people (including our personnel), the environment and property (including the *distribution network*).

(d) The *retail customer* must inform us promptly if there is a change in:

(i) their contact details

(ii) their equipment; or

(iii) the capacity or operation of connected equipment that may affect the quality, reliability, safety or metering of the supply of energy to the *premises* or the premises of any other person.

6. Access

6.1. The retail customer's obligations

(a) Under the energy laws, you must provide us and our authorised representatives (together with all necessary equipment) safe and

unhindered access to the premises, including taking appropriate action to prevent menacing or attack by animals at the premises, at any reasonable time to allow us to undertake works associated with your *premises* to maintain our network. Such works may include, but are not limited to:

(i) reading, testing, maintaining, inspecting or altering any metering installation at the premises ; and

(ii) calculating or measuring energy supplied or taken at the premises; and

(iii) checking the accuracy of metered consumption at the premises; and

(iv) replacing meters, control apparatus and other energy equipment of ours; and

(v) connecting or disconnecting the premises; and

(vi) examining or inspecting an energy installation at the premises; and

(vii) inspecting, making safe, operating, changing, maintaining, removing, repairing or replacing any of our works at the premises; and

(viii) undertaking repairs, testing or maintenance of the distribution system; and

(ix) clearing vegetation from the distribution system including any equipment owned by us; and

(x) taking action to determine the appropriate tariff or charging category for the premises; and

(xi) performing services requested by you or your retailer.

(b) The *retail customer* must ensure that any pets present on the premises are safely restrained or removed while we are on the premises. We accept no liability for injury to or loss of animals where appropriate care has not been taken.

(c) The *retail customer* must ensure that all areas of their *premises* that we could reasonably be expected to access in the course of carrying out *connection* work are made safe and without risk to health (including but not limited to asbestos, polychlorinated biphenyls, petroleum products etc) as required by the Work Health and Safety Act (ACT) 2011 (ACT).

6.2. Our obligations

If we or our representatives seek access to the premises under clause 6.1 above, we will:

(a) comply with all relevant *regulatory requirements*; and

(b) carry or wear official identification; and

(c) show the identification if requested

6.3. Costs for lack of access

If the *retail customer* does not provide the access required under clause 6.1, they may be required to pay the reasonable costs of any further attendances required at their *premises* as a result.

6.4. Controlled access

If the *retail customer* wishes to lock off access to the *meter* or to our infrastructure or equipment, the *retail customer* may contact our enquiries line on 13 14 93 for details of our requirements (if any).

7. What are the *connection charges*?

(a) We will only impose *connection charges* consistent with our *Connection Charge Policy* and our Schedule of Connection Charges in Attachment 3.

(b) The *connection charges* that are payable under this *model standing offer* are set out in Attachment 3.

(c) The connection charges must be paid by the retail customer's retailer unless;

(i) the retail customer applies directly to us for the basic connection service in which case we will advise the customer whether it must pay us directly;

(ii) the *retail customer* asks to pay the *connection charge* directly to us and we agree;

(iii) we agree with the *retail customer's retailer* that we will recover the *connection charge* directly from the *retail customer*.

(d) Amounts specified in Attachment 3 or which are otherwise payable under the *connection contract* may be stated to be exclusive or inclusive of GST. Paragraph (e) applies unless an amount payable under this contract is stated to include GST.

(e) Where an amount paid by you or by us under this contract is payment for a "taxable supply" as defined for GST purposes, to the extent permitted by law, that payment will be increased so that the cost of the GST payable on the taxable supply is passed on to the recipient of that taxable supply.

8. What requirements apply in relation to the export of electricity?

8.1. General

(a) In order for the *micro-embedded generating unit* to be eligible for *connection* to our *distribution network*, the generating unit must be *compliant* and the capacity of the generating unit (and any other generating units installed at the premises) must not be more than 30kW.

(b) The same electrical lines that are used to supply electricity to the premises are used to allow electricity to be fed back into the *distribution network*. The *retail customer* must have a fully operational connection from the premises to the *distribution network* under a *deemed AER approved connection contract,* a *deemed standard connection contract* or a *negotiated connection contract.*

8.2. Installation requirements

(a) The *retail customer* must ensure that only a *licensed or accredited person* carries out the:

(i) design;

(ii) installation; and

(iii) ongoing maintenance,

of the *micro-embedded generating unit*. The *retail customer* is responsible for all costs associated with the requirements in paragraphs 8.2 (a)(i) to (iii).

8.3. Metering requirements

(a) We do not own all of the *meters* in the ACT. If the *premises* has an existing *meter* and we are the owner, we will determine whether that *meter* is capable of measuring and recording the amount of electricity exported into the *distribution network* from the *micro-embedded generating unit*. If the existing *meter* is not capable of performing these functions we will replace the *meter*, install a second *meter* or both.

(b) We will install the replacement *meter*, or if the *retail customer* is eligible under the *Rules* the customer may arrange for it to be installed by another person who is accredited for that type of work (**accredited metering provider**). The *accredited metering provider* must comply with our *Service and Installation Rules* and the *ActewAGL Guidelines* when installing a *meter*. Only an *accredited metering provider* may install *meters*.

(c) If we install the *meter*, we may charge the *retail customer* for the service as set out in Attachment 3.

(d) If we do not own the existing *meter* on the *premises*, the *retail customer* will need to contact their *retailer* to arrange for the *meter* to be checked for its capacity to measure and record electricity exported to the *distribution network* by the *micro-embedded generating unit*, and for the *meter* to be upgraded if necessary.

(e) We will arrange for the *retail customer's meter* to be read each *account period*, unless the customer is a contestable customer and has engaged a *metering data provider* authorised by *AEMO*. The *retail customer's retailer* will receive a notification of the *meter* reading for period. Alternatively, we may estimate consumption for an *account period* as permitted by paragraph (j).

(f) On request from the *retail customer's retailer,* we will check the accuracy of a recent *meter* reading. The *retail customer* is entitled to one free check reading for each *account period*. The fee for additional check readings is shown in Attachment 3 and will be notified to the *retailer* to be included in the customer's next electricity account.

(g) We may estimate the quantity of electricity exported to the *distribution network* by the *micro-embedded generating unit* in the circumstances described in the relevant electricity Laws. Where possible, estimates will be calculated in accordance with the *metrology procedure*, which may include reference to an adjacent reading period(s). We may adjust a later electricity account to reflect the actual export, once known or more accurately estimated.

(h) The *retail customer* may request us (or an accredited service provider) to test the *meter* on the *premises*. We will carry out the test within 15 business days or as otherwise negotiated with the *retail customer*. The customer has the right to be present during the test. The *metrology procedure* will then apply. If we own the *meter*, we will refund the cost of the test if it shows the *meter* is defective as defined in the *Rules*.

(i) We may test any of our *meters* at the *premises* at our cost.

(j) We may replace our *meter* at the *premises* at our cost, for reasons including but not limited to compliance with *regulatory requirements*. When replacing the *meter*, we will comply with our obligations under the *regulatory requirements*.

(k) We will adjust our record of the amount of electricity the *micro-embedded generating unit* has exported to the *distribution network* as necessary if:

(i) the *meter* installed on the *premises* is defective; or

(ii) a check reading shows a *meter* reading to be incorrect.

(l) *Meters* provided by us remain our property notwithstanding installation at the *premises*.

(m) We will use reasonable endeavours to have our *meters* at the *premises* maintained in working order.

(n) We will use reasonable endeavours to prevent unauthorised access to your metering information held by us.

(o) We may pass through to you any *additional metering costs* incurred in relation to electricity generated by the *micro-embedded generating unit*.

8.4. Safety and technical requirements

(a) You must not, and must not permit any other person, to act contrary to or interfere with, remove or otherwise damage any switches, stickers, tags or other notices (**safety notices**) placed by us or your electrical

contractor on the *micro-embedded generating unit*. These *safety notices* may without limitation say things such as "do not operate", "danger" or similar.

9. Our liability

9.1. General

(a) The quality and reliability of the *retail customer's* electricity supply is subject to a variety of factors that may be beyond our control, including accidents, emergencies, weather conditions, vandalism, system demand, the technical limitations of the *distribution network* and the acts of other persons, including at the direction of a relevant authority.

(b) To the extent permitted by law, we give no condition, warranty or undertaking, and we make no representation to the *retail customer*, about the condition or suitability of electricity, its quality, fitness for purpose or safety, other than those set out in this *model standing offer*.

(c) Subject to paragraph (d), unless we have acted in bad faith or negligently, the National Energy Retail Law excludes our liability for any loss or damage the *retail customer* suffers as a result of the total or partial failure to supply electricity to their *premises*, which includes any loss or damage the *retail customer* suffers as a result of the defective supply of electricity.

(d) Subject to clause 9.2 and to the extent permitted by law, if the *retail customer* is a *large customer*, we are not liable:

(i) to the extent the *retail customer's* equipment caused or contributed to the problem;

(ii) for any loss, liability or expense the *retail customer* may suffer or incur other than as provided under paragraph (c);

(iii) for any loss of profits, business or anticipated savings or for any indirect or consequential loss arising out of or in connection with this contract, whether in contract or tort (including negligence).

(e) If the *retail customer* is a *large customer*, the *retail customer* must indemnify us against any injury, loss or damage suffered by a third party in connection with their use of electricity and claimed against us to the extent that the injury, loss or damage is caused by or contributed to by their negligence or their breach of the *model standing offer*.

9.2. Australian Consumer Law Guarantees

(a) The *Australian Consumer Law* requires us to automatically provide certain guarantees in relation to goods and services which cannot be excluded by contract. If services supplied under the *model standing offer* are supplied

to the *retail customer* as a 'consumer' within the meaning of that term in the *Australian Consumer Law* or relevant jurisdictional legislation, the *retail customer* will have the benefit of certain non-excludable rights and remedies in respect of the services (**consumer guarantees**), including guarantees that services are provided with due care and skill, and that goods are of acceptable quality.

(b) Nothing in this *model standing offer* excludes, restricts or modifies the operation of the *consumer guarantees* where to do so would contravene the *Australian Consumer Law* or cause any part of this clause to be void.

(c) However, if the services are services not ordinarily acquired for personal, domestic or household use or consumption, and the price of the services is $AUD40,000 or less, we limit our liability for breach of any *consumer guarantee* to (at our option) supplying the services again, or the cost of having the services supplied again.

(d) Except for the *consumer guarantees* and any requirements under the *National Energy Retail Law* and *National Energy Retail Rules*, the *National Electricity Law* and *National Electricity Rules* and the warranties and conditions set out in this contract, we exclude all warranties, terms and conditions implied by statute, at law, in fact or otherwise.

(e) However, where a failure to comply with a *consumer guarantee* can be remedied, and is not a major failure (as defined under the *Australian Consumer Law*), we may comply with a requirement to remedy that failure as set out in paragraph (c).

10. Privacy

(a) We will comply with all relevant privacy legislation in relation to the *retail customer's* personal information. A summary of our privacy policy is on our website. If the *retail customer* has any questions, they can contact our privacy officer.

(b) The *retail customer* consents to us using information about them, their supply address, their electricity usage and generation and any related or similar information:

(i) for internal purposes and reporting to our shareholders, parent company or their shareholders;

(ii) to comply with our obligations under this contract;

(iii) to make available to a third party, including the *retail customer's retailer*, for any of the purposes indicated below:

(a) if the *retail customer* is not readily identifiable, to help us identify them;

(b) to help assist recovery against the *retail customer* if they breach this contract;

(c) if required or permitted by law;

(d) for market research and analysis.

If the *retail customer* does not wish their details to be used for market research purposes, they may contact us on 13 14 93.

(c) We may use any personal information we hold about the *retail customer*, including their contact details, to assess their ongoing creditworthiness or the status of any account they have with us.

11. Complaints and dispute resolution

11.1. Complaints

(a) If the *retail customer* has a complaint, they may lodge a complaint with us in accordance with our standard complaints and dispute resolution procedures. Our standard complaints and dispute resolution procedures are published on our website. If the *retail customer is a small* customer, we must provide the *retail customer with a copy* of our standard complaints and dispute resolution procedures if the *retail customer* requests us to do so.

(b) If the *retail customer* is a *small customer* and they wish to contact us in connection with a query, complaint or dispute, our contact details are:

Phone: 6248 3519
Fax: 6248 3865

Email: resolutions@actewagl.com.au
Post:
Customer Liaison
GPO Box 366
Canberra City ACT 2601

(c) If the *retail customer* makes a complaint, we must respond to their complaint within the required timeframes in our standard complaints and dispute resolution procedures and inform the *retail customer*:

(i) of the outcome of their complaint and the reasons for our decision; and

(ii) that, if the *retail customer* is not satisfied with our response and they are a *small customer*, they have a right to refer the complaint to the ACT Civil and Administrative Tribunal.

11.2. Dispute resolution

(a) If the *retail customer* has a dispute with us we will try to resolve it with the *retail customer*

(b) If we cannot resolve that dispute informally with the *retail customer,* then the *retail customer* may ask us to formally review the issue which has caused the dispute.

(c) The *retail customer* must do so in writing, stating fully the basis of their complaint against us, no later than 28 days after the dispute has arisen. We will then formally review the *retail customer's* complaint and advise them of our decision in relation to them within 28 days of the *retail customer* giving notice to us under this clause.

(d) If the *retail customer* is a small customer and:

(i) we have advised the *retail customer* of our decision; and

(ii) they are still dissatisfied

they may be entitled to refer their complaint to the ACT Civil and Administrative Tribunal **(ACAT)** or take other action.

(e) The *retail customer* must continue to perform their obligations under this *model standing offer* despite any ongoing dispute.

(f) Nothing in this clause 11.2 prevents a party exercising its rights under this *model standing offer* or applying to a court for urgent relief.

12. Notices

(a) Notices and bills (where relevant) under this *model standing offer* must be sent in writing, unless this *model standing offer* or the *regulatory requirements* say otherwise.

(b) A notice or bill sent under this *model standing offer* is taken to have been received by the *retail customer* or by us (as relevant):

(i) on the date it is handed to the party, left at the party's *premises* (in the *retail customer's* case) or one of our offices (which excludes depots) (in our case) or successfully faxed to the party (which occurs when the sender receives a transmission report to that effect); or

(ii) on the date two business days after it is posted; or

(iii) on the date of transmission (unless the sender receives notice that delivery did not occur or has been delayed) if sent electronically and the use of electronic communication has been agreed between us.

13. Force Majeure

13.1. Effect of force majeure event

If, either the *retail customer* or we cannot meet an obligation under this contract because of an event outside the control of the party (**force majeure event**):

(a) the obligation, other than an obligation to pay money (including, in our case, a payment for failure to meet a guaranteed service level), is suspended to the extent it is affected by the event for so long as the event continues; and

(b) the affected party must use its best endeavours to give the other prompt notice of that fact including full particulars of the event, an estimate of its likely duration, the extent to which its obligations are affected and the steps taken to remove, overcome or minimise those effects.

13.2. Deemed prompt notice

If the effects of a *force majeure event* are widespread we will be taken to have given the *retail customer* prompt notice if we make the necessary information available by way of a 24 hour telephone service within 30 minutes of being advised of the event or otherwise as soon as practicable.

13.3. Obligation to overcome or minimise effect of force majeure event

A party that claims a *force majeure event* must use its best endeavours to remove, overcome or minimise the effects of that event as soon as practicable.

13.4. Settlement of industrial disputes

Nothing in this clause requires a party to settle an industrial dispute that constitutes a *force majeure event* in any manner other than the manner preferred by that party.

14. Miscellaneous

14.1. No representations or warranties

The *retail customer* acknowledges that in entering into this *connection contract* the *retail customer* has not relied on any separate promises from us that have not been included in the *connection offer*.

14.2. Entire agreement

This *connection offer* constitutes the entire agreement between the *retail customer* and us about its subject matter.

14.3. Assignment

(a) The *retail customer* may not assign its rights or obligations under the *connection contract* without our consent.

(b) Some obligations placed on us under this *connection offer* may be carried out by another person. If this *connection offer* imposes an obligation on us to do something, then:

(i) we are taken to have complied with the obligation if another person does it on our behalf; and

(ii) if an obligation is not complied with, we are still liable to the *retail customer* for the failure to comply.

14.4. How may the connection contract be varied or a right under it waived?

(a) We may by notice to the *retail customer* vary the *connection contract*:

(i) to reflect changes in the *regulatory requirements*, or to remedy an inconsistency between the contract and the *regulatory requirements*; or

(ii) where we consider that the variation is likely to benefit the *retail customer*, or have a neutral or minor detrimental impact on the *retail customer*.

(b) Otherwise the *connection contract* may be varied only in writing signed by both parties.

(c) A right under the *connection offer* may be waived only in writing by the person giving the waiver. The failure of a party to require performance of any provision of this *connection offer* does not affect their right to enforce the provision at a later time.

(d) If the *retail customer* seeks an amendment to the *connection contract*, then notwithstanding whether or not the proposed amendment is agreed to by us, the *retail customer* will pay our legal, administrative and other costs associated with any consideration or negotiation of the matter.

14.5. Governing law

This contract is governed by the laws of the Australian Capital Territory.

14.6. Inconsistency with regulatory requirements

To the extent permitted by law, in the event of an inconsistency between the *regulatory requirements* and the terms and conditions of this *connection offer*, this *connection offer* will prevail to the extent of the inconsistency.

15. Interpretation

In this contract:

(a) the singular includes the plural and vice versa;

(b) a reference to an agreement, code or another instrument includes any consolidation, amendment, variation or replacement of them;

(c) if an event must occur on a stipulated day which is not a *business day*, then the stipulated day will be taken to be the next *business day*;

(d) if a period of time is specified and dates from a given day or the day of an act or event, it is to be calculated exclusive of that day;

(e) a reference to a day is to be interpreted as the period of time commencing at midnight and ending 24 hours later;

(f) "including", "includes", "such as" and "in particular" do not limit the generality of the words which precede them or to which they refer;

(g) italicised terms used in this contract have the meaning given to them in the Definitions in clause 16; and

(h) headings are included for convenience and do not affect the interpretation of this contract.

16. Definitions

account period means the period for which an account is issued to the customer under the *retail customer*'s contract with its *retailer*.

accredited metering provider has the meaning in clause 8.3(b).

ActewAGL Guidelines means either or both of:

(a) the ActewAGL Guidelines for the connection of small generators in parallel with the ActewAGL distribution network; and/or;

(b) the ActewAGL Guidelines for photovoltaic installations up to 200kW connected via inverters to the ActewAGL network,

as applicable to the *micro-embedded generating unit*, and as amended or revised by ActewAGL from time to time.

additional metering costs means metering costs associated with the electricity generated by the *micro-embedded generating unit* that are in addition to metering costs for which we are responsible under the *Rules*.

AEMO means the Australian Energy Market Operator ACN 072 010 327 which is the manager of the National Electricity Market.

AER means the Australian Energy Regulator established by section 44AE of the *Competition and Consumer Act 2010* of the Commonwealth.

augmentation of a distribution system means work to enlarge the system or to increase its capacity to distribute electricity.

Australian Consumer Law means Schedule 2 of the *Competition and Consumer Act 2010* (Cth).

basic connection service has the meaning in clause 2.

business day means a day other than a Saturday, a Sunday or a public holiday.

compliant has the meaning given by section 5E of the *Electricity Feed-In (Renewable Energy Premium) Act 2008* (ACT).

connection has the meaning in clause 2(a).

connection alteration has the meaning in clause 2(b)(i).

connection charge means a charge imposed by us for a *connection service* in accordance with our *connection charge policy*.

connection charge policy means our connection charge policy as approved by the AER

connection contract means the contract formed from acceptance of a *connection offer.*

connection offer means an offer to enter into a *connection contract* with the *retail customer*.

connection service means either or both of the following:

(a) a service relating to a *new connection* for *premises*;

(b) a service relating to a *connection alteration* for *premises*.

consumer guarantees has the meaning in clause 9.2(a) of this contract.

contestable contractor means a person accredited by us or another accrediting agency under the Contestable Work Accreditation Code or licensed under the *Electricity Safety Act 1971* (ACT).

distribution network means the apparatus, equipment, plant and buildings used to convey, and control the conveyance of, electricity to customers (whether

wholesale or retail) (excluding any connection assets) operating at nominal voltages below 220kV other than any apparatus, equipment, plant and buildings which are operating at nominal voltages between 66kV and 220kV in parallel to, and providing support, to apparatus, equipment, plant and buildings operating above 220kV.

expedited connection has the meaning in clause 3.2.

force majeure event has the meaning given to that term in clause 13.1 of this contract.

GST has the meaning given in the *GST Act (A New Tax System (Goods and Services Tax) Act 1999 (Cth))*.

large customer means a business customer who consumes energy at business premises at or above 100MWh per annum or such other upper consumption threshold as defined under the *National Energy Retail Law*.

licensed or accredited person means a person who holds an appropriate electrical licence and is accredited to install, design or maintain the embedded generation unit, including in accordance with the requirements of:

(a) AS4777;

(b) the *Service and Installation Rules*; and

(c) any regulatory bodies associated with the work being undertaken (for example, holding a builder's licence or plumbing licence where applicable).

meter means a device complying with Australian Standards which measures and records the production or consumption of electrical energy.

metering data provider has the same meaning as that given to Metering Provider in the *National Electricity Rules*.

metrology procedure means the procedure developed and published by the *AEMO* in accordance with Rule 7.14 of the *National Electricity Rules*.

micro-embedded generating unit means a generating unit connected within the *distribution network* where the *connection* is of a kind contemplated by Australian Standard AS 4777 (Grid connection of energy systems via inverters).

micro-embedded generator means a *retail customer* who operates, or proposes to operate, a *micro-embedded generating unit*.

model standing offer means this document setting out the terms and conditions on which a distributor proposes to provide *basic connection services* to *retail customers* who are *micro-embedded generators*.

National Electricity Rules means the rules made under the *National Electricity Law* set out in the Schedule to the *National Electricity (South Australia) Act 1996* of South Australia.

National Energy Retail Law means the law of that name that is applied in the Australian Capital Territory by the *National Energy Retail Law (ACT) Act 2012*.

National Energy Retail Rules means the rules made by the AEMC under the *National Energy Retail Law*, as amended from time to time.

negotiated connection contract means a *connection contract* negotiated between a *retail customer* and us where the *connection service* sought by the customer:

(a) is neither a *basic connection service* nor a *standard connection service*; or

(b) is a *basic connection service* or a *standard connection service* but the customer elects to negotiate the terms and conditions on which the *connection service* is to be provided.

new connection has the meaning in clause 2(b)(ii).

non-compliance notice has the meaning in clause 5.2(a).

premises means the site details set out in Attachment 1.

regulatory requirements means any Commonwealth, State or local government legislation including Acts of Parliament, regulations, by-laws or other subordinate legislation, judicial, administrative or regulatory decrees or orders, or any mandatory approvals and guidelines, including industry standards or administrative interpretations of them, as may be in force and as amended from time to time.

retail customer means a person to whom electricity is sold by a *retailer* and supplied in respect of connection points, for the *premises* of the person

retailer means a person who is the holder of a *retailer* authorisation issued under the National Energy Retail Law in respect of the sale of electricity.

Rules means the National Electricity Rules.

safety notices has the meaning in clause 8.4(a).

Service and Installation Rules means the rules published from time to time by us for electricity service and installation.

small customer means:

(a) a residential customer; or

(b) a business customer who consumes energy at or below 100MWh per annum or such other upper consumption threshold as defined under the *National Energy Retail Law*.

supply service means a service (other than a *connection service*) relating to the supply of electricity.

Attachment 1 – Details of the connection service

Connection services related to a new connection or an alteration to an existing connection where:

1. the aerial service line does not exceed 22 metres in length for an overhead service, or
2. the underground service cable does not exceed 8 metres in length from the property boundary line most convenient to the ActewAGL network

and in any case having a maximum demand of not more than 100 amps per phase and no more than 30kW of embedded generation.

Attachment 2 – Timeframes for commencing and completing connecting work

Timeframes for basic connection work		
Number of connections	Work commencement and completion time	Additional completion time
1-4	Within 20 business days of you notifying us of your acceptance of our connection offer.	5 business days if third party contractors are required
5-20	Within 30 business days of you notifying us of your acceptance of our connection offer.	
21+	Within 45 business days of you notifying us of your acceptance of our connection offer.	

1. Multiple connection applications for the same address (i.e. within the same block of units or townhouses) submitted by the same contractor will be aggregated for the purpose of calculating the total number of connections being applied for.

2. If at the time we receive and accept your connection application you tell us that you require the connection work to be commenced and completed in a timeframe that is later than the relevant commencement and completion framework in this table we will use our best endeavours to commence and complete the connection work in accordance with that later timeframe, but subject to the terms of the connection offer.

3. If we attend your site and you are not ready for us to commence the connection work we may charge you our costs of attendance which you must pay before we will re-schedule the connection work. Upon receiving payment of our costs of attendance we will re-schedule the connection work in accordance with the relevant work commencement and completion timeframe in this table as if the day we receive payment was the day that you notified us of acceptance of our offer.

Attachment 3 – Schedule of Connection Charges

The *connection charges* as shown in the ActewAGL Distribution schedule of charges will apply to this *connection* service insofar as they relate to the services the applicant has requested. These charges are in accordance with our *connections charges policy* which can be found with our schedule of connection charges at published at www.actewagl.com.au.

Attachment G3 to Transitional Regulatory Proposal 2014/15

Model Standing Offer for basic connection services

Applies to retail customers who are not Micro-embedded generators

Effective from 1 July 2014

Preamble

This document is ActewAGL Distribution's *model standing offer* to provide *basic connection services*

ActewAGL Distribution ABN 76 670 568 688 is a partnership of ACTEW Distribution Ltd ABN 83 073 025 224 and Jemena Networks (ACT) Pty Ltd ABN 24 008552 663 and is referred to in this *model standing offer* as "we", "our" or "us".

Terms italicised in this model standing offer are defined in clause 15. In the event of an inconsistency between a term defined in this offer and the *National Electricity Rules*, the meaning in the *National Electricity Rules* is to prevail.

If accepted by the *retail customer* this document becomes the *connection contract* between us and *the retail customer* for the provision of *connection services*. On acceptance of the *model standing offer*, references to "*model standing offer"* should be taken to be references to *"connection contract"*.

1. Who does this offer apply to?

This offer applies to *retail customers* or persons acting on behalf of *retail customers* (in this contract, a reference to a *retail customer* includes a reference to a person acting on a *retail customer's* behalf) who are not *micro-embedded generators*. If the *retail customer* is a *micro-embedded generator*, we have a separate *model standing offer* that applies.

2. What services are covered by this offer?

This offer applies to *basic connection services* provided by us.

A *basic connection service* is a *connection service* that:

(a) relates to a physical link between our distribution system and a *retail customer*'s *premises* which allows the flow of electricity (a *connection*);

(b) involves either:

  (i) an alteration to an existing *connection* including an addition, upgrade, extension, expansion, *augmentation* or any other kind of alteration (a *connection alteration*);

  (ii) the establishment of a *connection* where there is no existing connection (a *new connection*); and

(c) involves minimal or no *augmentation* of our *distribution network*.

The type of connection covered by this offer is detailed in Attachment 1.

All assets provided under this *model standing offer* are our property.

This offer does not:

(a) in any way constitute an offer to supply or sell electricity to the *retail customer* ;

(b) provide for *supply services* including the energisation or de-energis*ation* o*f the premises*

(c) cover work *to b*e completed by the *retail customer* which must be completed prior to us completing the work under this *model standing offer*;

(d) cover:

(i) the installation of conduits;

(ii) civil works;

(iii) removal of vegetation;

(iv) obtaining dial-before you dig asset clearances for customer installations;

(v) arranging inspection of electrical works installed by the *retail customer*;

(vi) supply and installation of the point of entry cubicle;

(vii) termination of consumer mains.

3. How to accept this offer

3.1 General

(a) If the *retail customer* would like to accept this offer, the *retail customer* must complete our application for a *basic connection service* which is available on our website.

(b) Unless we agree to a different timeframe with the *retail customer* or the customer applies for an *expedited connection* (see clause 3.2) we will within 10 business days of receiving a completed application:

(i) advise the *retail customer* whether the proposed *connection service* is a *basic connection service*; and

(ii) if we are satisfied that the application is for a *basic connection service*, make a *connection offer* which will be consistent with this *model standing offer*.

(c) The *connection offer* will remain open for acceptance for 45 *business days* from the date of the offer and if not accepted within that period, it will

lapse unless the period is extended by agreement between us and the *retail customer*.

3.2 Expedited connection

(a) An *expedited connection* involves the *retail customer* and us entering into a *connection contract* on the terms of this *model standing offer* when we receive the customer's application for *basic connection services*.

(b) The *retail customer* may apply for an *expedited connection* in relation to a *basic connection service* if it falls within the terms of this *model standing offer* by electing an *expedited connection* on the application for *basic connection services*.

(c) If we are satisfied that the connection application is for *basic connection services* that fall within the terms of this *model standing offer* and the customer has elected an *expedited connection*, a *connection contract* is formed between us and the *retail customer* on the terms of the *model standing offer*.

(d) If we do not agree that an offer in terms of this *model standing offer* or any other *model standing offer* is appropriate for the *retail customer,* we will notify the *retail customer* accordingly.

3.3 Negotiated connection offer

(a) A *retail customer* may decide not to accept this *model standing offer* and instead negotiate a *negotiated connection contract* with us for *connection services* or both *connection services* and *supply services.*

(b) We may charge a reasonable fee to cover expenses directly and reasonably incurred by us in assessing any application for a *negotiated connection contract.*

4. What are the timeframes for commencing and completing the connection service work?

(a) Attachment 2 sets out the timeframes within which we will commence and complete the *connection service* work. We will use our best endeavours to ensure that the *connection service* work is carried out within the applicable timeframes.

However, we are not required to commence or continue with *connection service* work if the *retail customer* fails to comply with conditions of this offer that must be complied with by the *retail customer*.

(b) The timeframes for commencing the work are subject to the following conditions:

(i) all information provided by the *retail customer* including any further information requested by us is accurate and complete;

(ii) approval has been granted by the relevant person or entity for any vegetation clearing required by us and the vegetation has been cleared;

(iii) all connection works to be supplied by the *retail customer* have been completed to the satisfaction of our design officer;

(iv) where the *retail customer* is required to complete certain works prior to us completing our *connection service* work, the completion of those works.

(c) The timeframes for commencing and completing the connection works do not take into account factors outside of our control which may affect these timeframes. If such factors do arise, reasonable delay must be taken into account in those timeframes. We will advise you as soon as practicable of the nature and timing of the delay. Factors outside of our control include:

(i) weather;

(ii) the presence of a condemned or nailed pole on the *premises* that prevents or delays the required work from being undertaken;

(iii) access for service vehicles and plant being restricted or obstructed;

(iv) the presence on the *premises* of rock, other underground obstructions or physical land characteristics that could not have been foreseen by us and are not allowed for in the offer;

(v) the presence on the *premises* of other underground services not anticipated by us;

(vi) works not being completed to a sufficient standard, for example: non-compliant *meter* box or unauthorised deviations from the service marking;

(vii) non-compliant connection works

(viii) any delays required to comply with local laws and regulations.

(d) If the *retail customer* does not allow us to commence the *connection service* work within 6 months of the commencement of the *connection contract* or does not otherwise allow us to complete the work within 6 months of commencement of the *connection service* work, we may, at our discretion, do any or all of the following:

(i) review the terms of the *connection contract*;

(ii) terminate the *connection contract*;

(iii) make a revised *connection offer.*

5. What are the safety and technical requirements?

5.1 General

(a) The *retail customer* must comply with our *Service and Installation Rules*, any relevant ActewAGL standards and applicable *regulatory requirements*.

(b) The *retail customer* must provide and maintain at the *premises* any reasonable or agreed facility required by us.

(c) In some circumstances, we may require that the *retail customer*'s electrical contractor be on the *premises*. We will inform the *retail customer* when these circumstances arise and the *retail customer* will be responsible for arranging the contractor's attendance and any costs associated with this attendance.

(d) All property boundaries must be clearly marked. In the absence of any identifiable boundary marks in relation to residential areas, the presence of a fence will be taken to be the property boundary. We accept no liability for errors and omissions arising from an incorrectly marked boundary or the absence of a boundary marking.

(e) The *retail customer* must maintain the required clearance of new assets from aerial lines as required by the applicable *regulatory requirements*. If the *retail customer* does not maintain the required clearance, we may undertake this work and may charge the *retail customer* in accordance with clause 7 and Attachment 2.

5.2 Works completed by the retail customer

(a) The *retail customer* must ensure that all works completed by or on behalf of the *retail customer* are compliant with the *regulatory requirements*. Where works are non-compliant, we will issue a notice to the retail customer (a **non-compliance notice**). The *retail customer* must organise for the non-compliance to be rectified and notify us when the rectification has taken place.

(b) Where the *retail customer* completes any work in relation to the *premises* which is required to be inspected by third parties, including regulatory bodies or statutory authorities, the *retail customer* must organise and ensure the completion of these inspections prior to us commencing work. If we have to revisit the premises because these inspections have not been carried out, we may charge the *retail customer* in accordance with clause 7 and Attachment 2 in relation to the revisit.

5.3 Protection of our distribution network

(a) The *retail customer* must:

(i) use reasonable endeavours to protect our equipment and the *meter* installed on their *premises* from unauthorised interference;

(ii) notify us of any interference, defect or damage within 5 business days of becoming aware of it.

(iii) pay the reasonable costs of repair or replacement of our equipment installed on their *premises,* on request, if the defect or damage was caused by the *retail customer* or by another person in circumstances where the *retail customer* failed to take reasonable care to prevent that;

(iv) not do anything that interferes with the safe or efficient operation of our *distribution network* or permit anyone else to do so.

(b) If we reasonably consider that the *retail customer's connection* or any of the customers equipment is having an adverse effect on the *distribution network*, the *retail customer* must comply with any reasonable directions we give the customer to correct that interference or effect.

(c) The *retail customer* acknowledges that failure to comply with their obligations in paragraphs (a) and (b) may result in a safety hazard for people (including our personnel), the environment and property (including the *distribution network*).

(d) The *retail customer* must inform us promptly if there is a change in:

(i) their contact details

(ii) their equipment; or

(iii) the capacity or operation of connected equipment that may affect the quality, reliability, safety or metering of the supply of energy to the *premises* or the premises of any other person.

6. Access

6.1 The retail customer's obligations

(a) Under the energy laws, you must provide us and our authorised representatives (together with all necessary equipment) safe and unhindered access to the premises , including taking appropriate action to prevent menacing or attack by animals at the premises, at any reasonable time to allow us to undertake works associated with your premises to maintain our network. Such works may include, but are not limited to:

(i) reading, testing, maintaining, inspecting or altering any metering installation at the premises ; and

(ii) calculating or measuring energy supplied or taken at the premises; and

(iii) checking the accuracy of metered consumption at the premises; and

(iv) replacing meters, control apparatus and other energy equipment of ours; and

(v) connecting or disconnecting the premises; and

(vi) examining or inspecting an energy installation at the premises; and

(vii) inspecting, making safe, operating, changing, maintaining, removing, repairing or replacing any of our works at the premises; and

(viii) undertaking repairs, testing or maintenance of the distribution system; and

(ix) clearing vegetation from the distribution system including any equipment owned by us; and

(x) taking action to determine the appropriate tariff or charging category for the premises; and

(xi) performing services requested by you or your retailer.

(b) The *retail customer* must ensure that any pets present on the premises are safely restrained or removed while we are on the premises. We accept no liability for injury to or loss of animals where appropriate care has not been taken.

(c) The *retail customer* must ensure that all areas of their *premises* that we could reasonably be expected to access in the course of carrying out *connection* work are made safe and without risk to health (including but not limited to asbestos, polychlorinated biphenyls, petroleum products etc) as required by the Work Health and Safety Act (ACT) 2011 (ACT).

6.2 Our obligations

If we or our representatives seek access to the premises under clause 6.1 above we will:

(a) comply with all relevant *regulatory requirements*; and

(b) carry or wear official identification; and

(c) show the identification if requested

6.3 Costs for lack of access

If the *retail customer* does not provide the access required under clause 6.1, they may be required to pay the reasonable costs of any further attendances required at their *premises* as a result.

6.4 Controlled access

If the *retail customer* wishes to lock off access to the *meter* or to our infrastructure or equipment, the *retail customer* may contact our enquiries line on 13 14 93 for details of our requirements (if any).

7. What are the *connection charges*?

(a) We will only impose *connection charges* consistent with our *Connection Charge Policy* and our Schedule of Connection Charges in Attachment 3

(b) The *connection charges* that are payable under this *model standing offer* are set out in Attachment 3.

(c) The *connection charges* must be paid by the retail *customer's retailer* unless;

(i) the *retail customer* applies directly to us for the basic connection service in which case we will advise the customer whether it must pay us directly;

(ii) the *retail customer* asks to pay the *connection charge* directly to us and we agree;

(iii) we agree with the *retail customer's retailer* that we will recover the *connection charge* directly from the *retail customer.*

(d) Amounts specified in Attachment 3 or which are otherwise payable under the *connection contract* may be stated to be exclusive or inclusive of *GST*. Paragraph (e) applies unless an amount payable under this contract is stated to include *GST*.

(e) Where an amount paid by you or by us under this contract is payment for a "taxable supply" as defined for *GST* purposes, to the extent permitted by

law, that payment will be increased so that the cost of the *GST* payable on the taxable supply is passed on to the recipient of that taxable supply.

8. Our liability

8.1 General

(a) The quality and reliability of the *retail customer's* electricity supply is subject to a variety of factors that may be beyond our control, including accidents, emergencies, weather conditions, vandalism, system demand, the technical limitations of the *distribution network* and the acts of other persons, including at the direction of a relevant authority.

(b) To the extent permitted by law, we give no condition, warranty or undertaking, and we make no representation to the *retail customer*, about the condition or suitability of electricity, its quality, fitness for purpose or safety other than those set out in this *model standing offer*.

(c) Subject to paragraph (d), unless we have acted in bad faith or negligently, the National Energy Retail Law excludes our liability for any loss or damage the *retail customer* suffers as a result of the total or partial failure to supply electricity to their *premises*, which includes any loss or damage the *retail customer* suffers as a result of the defective supply of electricity.

(d) Subject to clause 8.2 and to the extent permitted by law, if the *retail customer* is a *large customer*, we are not liable:

(i) to the extent the *retail customer's* equipment caused or contributed to the problem;

(ii) for any loss, liability or expense the *retail customer* may suffer or incur other than as provided under paragraph (c);

(iii) for any loss of profits, business or anticipated savings or for any indirect or consequential loss arising out of or in connection with this contract, whether in contract or tort (including negligence).

(e) If the *retail customer* is a *large customer*, the *retail customer* must indemnify us against any injury, loss or damage suffered by a third party in connection with their use of electricity and claimed against us to the extent that the injury, loss or damage is caused by or contributed to by their negligence or their breach of the *model standing offer*.

8.2 Australian Consumer Law Guarantees

(a) The *Australian Consumer Law* requires us to automatically provide certain guarantees in relation to goods and services which cannot be excluded by contract. If services supplied under the *model standing offer* are supplied

to the *retail customer* as a 'consumer' within the meaning of that term in the *Australian Consumer Law* or relevant jurisdictional legislation, the *retail customer* will have the benefit of certain non-excludable rights and remedies in respect of the services (**consumer guarantees**), including guarantees that services are provided with due care and skill, and that goods are of acceptable quality.

(b) Nothing in this *model standing offer* excludes, restricts or modifies the operation of the *consumer guarantees* where to do so would contravene the *Australian Consumer Law* or cause any part of this clause to be void.

(c) However, if the services are services not ordinarily acquired for personal, domestic or household use or consumption, and the price of the services is $AUD40,000 or less, we limit our liability for breach of any *consumer guarantee* to (at our option) supplying the services again, or the cost of having the services supplied again.

(d) Except for the *consumer guarantees* and any requirements under the *National Energy Retail Law* and *National Energy Retail Rules*, the *National Electricity Law* and *National Electricity Rules* and the warranties and conditions set out in this contract, we exclude all warranties, terms and conditions implied by statute, at law, in fact or otherwise.

(e) However, where a failure to comply with a *consumer guarantee* can be remedied, and is not a major failure (as defined under the *Australian Consumer Law*), we may comply with a requirement to remedy that failure as set out in paragraph (c).

9. Privacy

(a) We will comply with all relevant privacy legislation in relation to the *retail customer's* personal information. A summary of our privacy policy is on our website. If the *retail customer* has any questions, they can contact our privacy officer.

(b) The *retail customer* consents to us using information about them, their supply address, their electricity usage and generation and any related or similar information:

(i) for internal purposes and reporting to our shareholders, parent company or their shareholders;

(ii) to comply with our obligations under this contract;

(iii) to make available to a third party, including the *retail customer's retailer*, for any of the purposes indicated below:

(a) if the *retail customer* is not readily identifiable, to help us identify them;

(b) to help assist recovery against the *retail customer* if they breach this contract;

(c) if required or permitted by law;

(d) for market research and analysis.

If the *retail customer* does not wish their details to be used for market research purposes, they may contact us on 13 14 93.

(c) We may use any personal information we hold about the *retail customer*, including their contact details, to assess their ongoing creditworthiness or the status of any account they have with us.

10. Complaints and dispute resolution

10.1 Complaints

(a) If the *retail customer has a comp*laint *they may* lodge a complaint with us in accordance with our standard complaints and dispute resolution procedures. Our standard complaints and dispute resolution procedures are published on our website. If the *retail customer is a small* customer, we must provide the *retail customer with a copy* of our standard complaints and dispute resolution procedures if the *retail customer* requests us to do so.

(b) If the *retail customer* is a *small customer* and they wish to contact us in connection with a query, complaint or dispute, our contact details are:

Phone: 6248 3519
Fax: 6248 3865

Email: resolutions@actewagl.com.au
Post:
Customer Liaison
GPO Box 366
Canberra City ACT 2601

(c) If the *retail customer* makes a complaint, we must respond to their complaint within the required timeframes in our standard complaints and dispute resolution procedures and inform the *retail customer*:

(i) of the outcome of their complaint and the reasons for our decision; and

(ii) that, if the *retail customer* is not satisfied with our response and they are a *small customer*, they have a right to refer the complaint to the ACT Civil and Administrative Tribunal.

10.2 Dispute resolution

(a) If the *retail customer* has a dispute with us we will try to resolve it with the *retail customer*

(b) If we cannot resolve that dispute informally with the *retail customer*, then the *retail customer* may ask us to formally review the issue which has caused the dispute.

(c) The *retail customer* must do so in writing, stating fully the basis of their complaint against us, no later than 28 days after the dispute has arisen. We will then formally review the *retail customer's* complaint and advise them of our decision in relation to them within 28 days of the *retail customer* giving notice to us under this clause.

(d) If the *retail customer* is a small customer and:

(i) we have advised the retail customer of our decision; and

(ii) they are still dissatisfied

they may be entitled to refer their complaint to the ACT Civil and Administrative Tribunal **(ACAT)** or take other action.

(e) The *retail customer* must continue to perform their obligations under this *model standing offer* despite any ongoing dispute.

(f) Nothing in this clause 10.2 prevents a party exercising its rights under this *model standing offer* or applying to a court for urgent relief.

11. Notices

(a) Notices and bills (where relevant) under this *model standing offer* must be sent in writing, unless this *model standing offer* or the *regulatory requirements* say otherwise.

(b) A notice or bill sent under this *model standing offer* is taken to have been received by the *retail customer* or by us (as relevant):

(i) on the date it is handed to the party, left at the party's *premises* (in the *retail customer's* case) or one of our offices (which excludes depots) (in our case) or successfully faxed to the party (which

occurs when the sender receives a transmission report to that effect); or

(ii) on the date two *business days* after it is posted; or

(iii) on the date of transmission (unless the sender receives notice that delivery did not occur or has been delayed) if sent electronically and the use of electronic communication has been agreed between us.

12. Force Majeure

12.1 Effect of force majeure event

If, either the *retail customer* or we cannot meet an obligation under this contract because of an event outside the control of the party (**force majeure event**):

(a) the obligation, other than an obligation to pay money (including, in our case, a payment for failure to meet a guaranteed service level), is suspended to the extent it is affected by the event for so long as the event continues; and

(b) the affected party must use its best endeavours to give the other prompt notice of that fact including full particulars of the event, an estimate of its likely duration, the extent to which its obligations are affected and the steps taken to remove, overcome or minimise those effects.

12.2 Deemed prompt notice

If the effects of a *force majeure event* are widespread we will be taken to have given the *retail customer* prompt notice if we make the necessary information available by way of a 24 hour telephone service within 30 minutes of being advised of the event or otherwise as soon as practicable.

12.3 Obligation to overcome or minimise effect of force majeure event

A party that claims a *force majeure event* must use its best endeavours to remove, overcome or minimise the effects of that event as soon as practicable.

12.4 Settlement of industrial disputes

Nothing in this clause requires a party to settle an industrial dispute that constitutes a *force majeure event* in any manner other than the manner preferred by that party.

13. Miscellaneous

13.1 No representations or warranties

The *retail customer* acknowledges that in entering into this *connection contract* the *retail customer* has not relied on any separate promises from us that have not been included in the *connection offer*.

13.2 Entire agreement

This *connection offer* constitutes the entire agreement between the *retail customer* and us about its subject matter.

13.3 Assignment

(a) The *retail customer* may not assign its rights or obligations under the *connection contract* without our consent.

(b) Some obligations placed on us under this *connection offer* may be carried out by another person. If this *connection offer* imposes an obligation on us to do something, then:

(i) we are taken to have complied with the obligation if another person does it on our behalf; and

(ii) if an obligation is not complied with, we are still liable to the *retail customer* for the failure to comply.

13.4 How may the connection contract be varied or a right under it waived?

(a) We may by notice to the *retail customer* vary the *connection contract*:

(i) to reflect changes in the *regulatory requirements*, or to remedy an inconsistency between the contract and the *regulatory requirements*; or

(ii) where we consider that the variation is likely to benefit the *retail customer*, or have a neutral or minor detrimental impact on the *retail customer*.

(b) Otherwise the *connection contract* may be varied only in writing signed by both parties.

(c) A right under the *connection offer* may be waived only in writing by the person giving the waiver. The failure of a party to require performance of any provision of this *connection offer* does not affect their right to enforce the provision at a later time.

(d) If the *retail customer* seeks an amendment to the *connection contract*, then notwithstanding whether or not the proposed amendment is agreed to by us, the *retail customer* will pay our legal, administrative and other costs associated with any consideration or negotiation of the matter.

13.5 Governing law

This contract is governed by the laws of the Australian Capital Territory.

13.6 Inconsistency with regulatory requirements

To the extent permitted by law, in the event of an inconsistency between the *regulatory requirements* and the terms and conditions of this *connection offer*, this *connection offer* will prevail to the extent of the inconsistency.

14. Interpretation

In this contract:

(a) the singular includes the plural and vice versa;

(b) a reference to an agreement, code or another instrument includes any consolidation, amendment, variation or replacement of them;

(c) if an event must occur on a stipulated day which is not a *business day*, then the stipulated day will be taken to be the next *business day*;

(d) if a period of time is specified and dates from a given day or the day of an act or event, it is to be calculated exclusive of that day;

(e) a reference to a day is to be interpreted as the period of time commencing at midnight and ending 24 hours later;

(f) "including", "includes", "such as" and "in particular" do not limit the generality of the words which precede them or to which they refer;

(g) italicised terms used in this contract have the meaning given to them in the Definitions in clause 15; and

(h) headings are included for convenience and do not affect the interpretation of this contract.

15. Definitions

augmentation of a distribution system means work to enlarge the system or to increase its capacity to distribute electricity.

Australian Consumer Law means Schedule 2 of the *Competition and Consumer Act 2010* (Cth).

basic connection service has the meaning in clause 2.

business day means a day other than a Saturday, a Sunday or a public holiday

connection has the meaning in clause 2(a).

connection alteration has the meaning in clause 2(b)(i).

connection charge means a charge imposed by us for a *connection service i*n accordance with our *connection charge policy*.

connection charge policy means our connection charge policy as approved by the *AER.*

connection contract means the contract formed from acceptance of a *connection offer.*

connection offer means an offer to enter into a *connection contract* with the *retail customer*.

connection service means either or both of the following:

(a) a service relating to a *new connection* for *premises*;

(b) a service relating to a *connection alteration* for *premises*.

consumer guarantees has the meaning in clause 8.2(a).

contestable contractor means a person accredited by us or another accrediting agency under the Contestable Work Accreditation Code or licensed under the *Electricity Safety Act 1971* (ACT).

distribution network means the apparatus, equipment, plant and buildings used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail) (excluding any connection assets) operating at nominal voltages below 220kV other than any apparatus, equipment, plant and buildings which are operating at nominal voltages between 66kV and 220kV in parallel to, and providing support, to apparatus, equipment, plant and buildings operating above 220kV.

embedded generator means a person that owns, controls or operates an *embedded generating unit.*

expedited connection has the meaning in clause 3.2.

force majeure event has the meaning given to that term in clause 12.1 of this contract.

GST has the meaning given in the *GST Act (A New Tax System (Goods and Services Tax) Act 1999 (Cth))*.

large customer means a business customer who consumes energy at business premises at or above 100MWh per annum or such other upper consumption threshold as defined under the *National Energy Retail Law*.

meter means a device complying with Australian Standards which measures and records the production or consumption of electrical energy.

micro-embedded generating unit means a generating unit connected within the *distribution network* where the *connection* is of a kind contemplated by Australian Standard AS 4777 (Grid connection of energy systems via inverters).

micro-embedded generator means a *retail customer* who operates, or proposes to operate, an *micro-embedded generating unit*.

model standing offer means this document setting out the terms and conditions on which a distributor proposes to provide *basic connection services* to *retail customers* who are not *micro-embedded generators*.

National Electricity Rules means the rules made under the *National Electricity Law* set out in the Schedule to the *National Electricity (South Australia) Act 1996* of South Australia.

National Energy Retail Law means the law of that name that is applied in the Australian Capital Territory by the *National Energy Retail Law (ACT) Act 2012*.

National Energy Retail Rules means the rules made by the AEMC under the *National Energy Retail Law*, as amended from time to time.

negotiated connection contract means a *connection contract* negotiated between a *retail customer* and us where the *connection service* sought by the customer:

(a) is neither a *basic connection service* nor a *standard connection service*; or

(b) is a *basic connection service* or a *standard connection service* but the customer elects to negotiate the terms and conditions on which the *connection service* is to be provided.

new connection has the meaning in clause 2(b)(ii).

non-compliance notice has the meaning in clause 5.2(a).

premises means the site details set out in Attachment 1.

regulatory requirements means any Commonwealth, State or local government legislation including Acts of Parliament, regulations, by-laws or other subordinate legislation, judicial, administrative or regulatory decrees or orders, or any mandatory approvals and guidelines, including industry standards or

administrative interpretations of them, as may be in force and as amended from time to time.

retail customer means a person to whom electricity is sold by a *retailer* and supplied in respect of connection points, for the *premises* of the person.

retailer means a person who is the holder of a *retailer* authorisation issued under the National Energy Retail Law in respect of the sale of electricity.

Service and Installation Rules means the rules published from time to time by us for electricity service and installation.

small customer means:

(a) a residential customer; or

(b) a business customer who consumes energy at or below 100MWh per annum or such other upper consumption threshold as defined under the *National Energy Retail Law*.

supply services means a service (other than a *connection service*) relating to the supply of electricity.

Attachment 1 – Details of the connection service

Connection services related to a new connection or an alteration to an existing connection where:

1. the aerial service line does not exceed 22 metres in length for an overhead service, or
2. the underground service cable does not exceed 8 metres in length from the property boundary line most convenient to the ActewAGL network

and in any case having a maximum demand of not more than 100 amps per phase and no embedded generation.

Attachment 2 – Timeframes for commencing and completing connecting work

Timeframes for basic connection work		
Number of connections	Work commencement and completion time	Additional completion time
1-4	Within 20 business days of you notifying us of your acceptance of our connection offer.	5 business days if third party contractors are required
5-20	Within 30 business days of you notifying us of your acceptance of our connection offer.	
21+	Within 45 business days of you notifying us of your acceptance of our connection offer.	

1. Multiple connection applications for the same address (i.e. within the same block of units or townhouses) submitted by the same contractor will be aggregated for the purpose of calculating the total number of connections being applied for.

2. If at the time we receive and accept your connection application you tell us that you require the connection work to be commenced and completed in a timeframe that is later than the relevant commencement and completion framework in this table we will use our best endeavours to commence and complete the connection work in accordance with that later timeframe, but subject to the terms of the connection offer.

3. If we attend your site and you are not ready for us to commence the connection work we may charge you our costs of attendance which you must pay before we will re-schedule the connection work. Upon receiving payment of our costs of attendance we will re-schedule the connection work in accordance with the relevant work commencement and completion timeframe in this table as if the day we receive payment was the day that you notified us of acceptance of our offer.

Attachment 3 – Schedule of Connection Charges

The *connection charges* as shown in the ActewAGL Distribution schedule of charges will apply to this *connection* service insofar as they relate to the services the applicant has requested. These charges are in accordance with our *connections charges policy* which can be found with our schedule of connection charges published at www.actewagl.com.au.