ActewAGL Distribution 2015/16

Statement of Tariff Classes and Tariffs

June 2015

ActewAGL Distribution ABN 76 670 568 688
A partnership of ACTEW Distribution Ltd ABN 83 073 025 224 and
Jemena Networks (ACT) Pty Ltd ABN 24 008 552 663
Head Office: ActewAGL House, 40 Bunda Street, CANBERRA ACT 2600
GPO Box 366, CANBERRA ACT 2601
http://www.actewagl.com.au

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Overview

- ActewAGL Distribution offers customers a range of network tariff options across three tariff classes—residential, commercial low voltage and high voltage. Customers are able to choose the tariff that best suits their needs, subject to some eligibility requirements as set out in this document.
- The proposed tariffs and charges are set in accordance with the relevant requirements in the National Electricity Rules (Rules) and the Australian Energy Regulator's (AER's) *Final Decision, ActewAGL distribution determination 2015-16 to 2018-19* (Final Decision). The AER has set the allowed change in average prices for ActewAGL Distribution's distribution network services (CPI minus the X factor of 18.76 per cent for 2015/16). The annual charges for existing metering services are being reduced by 15.7 per cent to the amounts that the AER has set in its Final Decision.
- No changes are proposed to the types of network tariffs offered in 2015/16. However changes are proposed to the structure of metering charges.
- Customers requesting new meters (for new connections or meter upgrades) from 1 July 2015 will be required to pay the full AER approved cost of the meter when it is installed. Customers who were connected before 1 July 2015 (and have not paid for their meter up-front) will pay an annual meter capital charge to contribute to the recovery of the cost of the existing meter asset base.
- The charges for ancillary services, including connection services, will change to ensure that the customers requesting the services will pay the full cost of providing the services.
- The proposed distribution use of system (DUOS) charges for 2015/16 are 0.87 cents per kWh, or 16.2 per cent in nominal terms, lower on average than the DUOS charges for 2014/15. Transmission use of system (TUOS) charges, levied on ActewAGL Distribution by TransGrid, are 0.01 cents per kWh, or 0.6 per cent in nominal terms, higher on average than the charges for 2014/15. The charges for jurisdictional schemes[1] are 0.01 cents per kWh, or 1.0 per cent in nominal terms, higher on average than the charges for 2014/15.
- The proposed network use of system (NUOS) charges (comprising DUOS, TUOS charges for jurisdictional schemes and the capital component of metering) plus the non-capital component of metering for 2015/16 are, on average 1.05 c/kWh,

[1] Jurisdictional schemes are expenses incurred by ActewAGL Distribution pursuant to ACT Government requirements, such as the feed-in tariff.

or 11.9 per cent in nominal terms, lower than the average NUOS plus metering charges for 2014/15.

- ActewAGL Distribution estimates that the proposed 2015/16 network and metering charges will lower the electricity network bill for an average residential customer, consuming 7000 kWh on the residential basic network charge, by $1.24 per week (including GST)—a real decrease of 11.0 per cent (8.8 per cent nominal). For a commercial customer consuming 30 MWh per annum on the general network charge, the proposed network and metering price decreases would lower the electricity network bill by $7.87 per week (including GST)—implying a 12.0 per cent real reduction in network prices (9.8 per cent nominal decrease).

1 Introduction

1.1 Purpose and scope of the document

ActewAGL Distribution has prepared this statement of tariff classes and tariffs in accordance with the requirements in chapter 6 of the National Electricity Rules (the Rules).[2] Clause 6.18.9 requires ActewAGL Distribution to maintain on its website:

- a statement of tariff classes[3] and tariffs that are applicable to each class;
- for each tariff within a tariff class, the charging parameters[4] and the elements of service to which they relate; and
- a statement of expected price trends, giving an indication of how ActewAGL Distribution expects prices to change over the regulatory period, and the reasons for those expected changes.

This document contains the required information. The statement covers the regulatory period (1 July 2015 to 30 June 2019). The prices for 1 July 2015 to 30 June 2016 are as approved by the AER on 12 June 2015. The prices for the following years are based on the X factors approved by the AER in its Final Decision for the period.[5] The 2016-19 prices are indicative.

1.2 Background

The AER is responsible for the economic regulation of distribution services provided by ActewAGL Distribution. The AER has determined the average annual revenue (AAR) for ActewAGL Distribution's standard control services and the price caps for alternative control services (ancillary network services and metering services) for the 2015/16 regulatory year.[6] The AER has set the X factor for standard control services for 2015/16 at 18.76 per cent.[7] Prices for ancillary services are to be raised or lowered to fully recover costs. Metering services charges are to be reduced 15.7 per cent and split into 2 components: capital (comprising 67 per cent of the charge) and non-capital (comprising the remainder).

This document should be read in conjunction with the AER's Final Decision, ActewAGL Distribution's Subsequent Regulatory Proposal and ActewAGL Distribution's Revised Regulatory Proposal (all published on the AER's website), as they set out in detail the basis of the costs that are reflected in ActewAGL Distribution's prices. Expenditure on operation and maintenance will decline in the regulatory period in response to the AER's rejection of ActewAGL Distribution's proposed efficient level of expenditure. Expenditure on asset replacement will include underground cables, which in many cases have reached the end of

[2] Under rule 11.73.1(b), the new chapter 6 pricing rules do not apply to ActewAGL Distribution until 1 July 2017. All references to Chapter 6 refer to the old Chapter 6.
[3] A *tariff class* is defined in Chapter 10 of the *Network Electricity Rules* as "a class of for one or more direct control services who are subject to a particular tariff or particular tariffs.'
[4] Charging parameters are defined as "the constituent elements of a tariff" in chapter 10 of the *National Electricity Rules*.
[5] AER 2015, *Final Decision, ActewAGL distribution determination 2015-16 to 2018-19*.
[6] AER 2015, *Final Decision,*
[7] AER 2015, *Final Decision,* (p.1.9)

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 in the 2015-19 regulatory period as ActewAGL Distribution continues the pole replacement program that was approved by the AER in 2009.

1.3 Structure of the document

ActewAGL Distribution's tariff structure and proposed 2015/16 charges for network services are set out in chapter 2. The chapter includes details on the components and rationale for each tariff, as well as a discussion of the changes relative to 2014/15.

The structure and basis of ActewAGL Distribution's charges for ancillary network services and metering services, the charges for 2014/15 and the changes relative to 2014/15 are presented and explained in chapter 3.

Expected price trends over the period 2015-19 are provided in chapter 4.

2 Network tariffs

The Rules (clause 6.18.2) require a description of the *tariff classes*[8] and tariffs that are to apply in 2015/16. For each tariff within a tariff class, the *charging parameters*[9] and the elements of service to which they relate must also be set out in the pricing proposal.

2.1 Network tariff structure

ActewAGL Distribution's offers network tariffs in three tariff classes:

- Residential;
- Commercial low voltage (LV); and
- High voltage (HV).

The *Rules* stipulate that tariff classes must be constituted with regard to the need to group customers together on an economically efficient basis and the need to avoid unnecessary transactions costs (clause 6.18.3(d)). ActewAGL Distribution meets this requirement by grouping customers according to type of connection (residential or commercial), and connection voltage (LV or HV). Customers within each class have similar load and connection characteristics. The relevant costs for each class can then be identified and reflected in the tariffs for each class.

Within each of these three tariff classes, ActewAGL Distribution has developed a suite of network tariffs that effectively meet the diverse needs of its customer base, encourage efficient use of the network and signal the costs of future network expansion. Residential customers are offered a choice of four network tariff options plus two controlled load off-peak options and an embedded renewable generation tariff option. Commercial LV customers are offered four main tariff options. Commercial customers on the general network charge also have access to the controlled load off-peak tariff options and the embedded renewable generation tariff option on a similar basis to customers in the residential class. Commercial HV customers are offered four tariff options. Customers are able to choose the option which best suits their needs, subject to the eligibility criteria set out in Tables 2.1 to 2.3 below.

The network tariffs comprise different combinations of the following *charging parameters*:

- Network access charges—these apply per customer for residential consumers and per connection point for commercial customers. They involve a fixed daily charge and do not vary with electricity consumption or capacity;
- Energy charges—these apply to each unit of electricity consumed. The c/kWh rate may vary with the level of consumption (with higher rates applying above certain thresholds) or with the time-of-use (with lower rates applying at off-peak periods);
- Maximum demand charges—these apply per connection point for some commercial tariffs. They involve a charge per unit of maximum demand (in c/kVA/day). The

[8] A tariff class is defined in chapter 10 of the *National Electricity Rules* as "a class of customers for one or more direct control services who are subject to a particular tariff or particular tariffs".
[9] Charging parameters are defined as "the constituent elements of a tariff" in chapter 10 of the *National Electricity Rules*.

maximum demand is the highest demand calculated over a 30-minute interval during the billing period;

- Capacity charges—these apply on the same basis as maximum demand charges, but are for the maximum demand calculated over a 30-minute interval during the previous 12 months.

Network access charges relate to the connection services provided to customers. They are associated with the costs of the provision and use of connection assets for each tariff class, as well as customer related costs such as network call centre costs.

Energy charges relate to the distribution services provided to customers. They are linked to the costs of the provision and use of distribution assets (other than connection assets), and also recover most of the common services costs. Higher energy rates at peak periods reflect higher costs. Higher energy rates beyond 330 kWh per day for the general network charge encourage larger consumers with a good load factor to move to demand or time-of-use network charges.

Maximum demand and capacity charges relate to the capacity provided to meet maximum demand and provide incentives for consumers to manage their load on the network.

The allocation of costs to charging parameters is discussed further in section 2.4 below.

The tariffs and charging parameters for each tariff class are shown in the following tables (2.1 to 2.3). The tables include an explanation of the purpose of each tariff and the customers to which each tariff may apply.

2.1.1 Network tariffs for residential customers

ActewAGL Distribution's residential network tariff structure is shown in Table 2-1. The *Residential time-of-use (TOU), Residential 5000* and *Residential with heat pump* tariffs are refinements of the *Residential basic* tariff to reflect customer load profiles. The *Residential TOU* tariff provides an opportunity and an incentive for customers with the necessary metering capability to respond to price signals at different times of the day, where reflected in the final price of their retailer, and manage their electricity bill in line with the costs they impose on the network. The Residential TOU tariff is the default tariff for all new residential and commercial connections. The *Residential 5000* and *Residential with heat pump* tariffs involve a higher connection charge and an inclining block structure with a higher energy charge (cents per kWh) applying above certain thresholds. These tariffs more accurately tailor costs to the load profile of these customers. The off-peak tariff options can be used in conjunction with the *Residential basic* and the *Residential TOU* network charges.

Table 2-1 Network tariff structure – residential

Tariff	*Charging parameters*	*Explanation*
Residential basic network	Network access charge (c/day/customer) Energy charge (c/kWh)	The residential basic network tariff is available to installations at private dwellings, excluding serviced apartments, but including: • Living quarters for members and staff of religious orders; • Living quarters on farms; • Charitable homes; • Retirement villages; • Residential sections of nursing homes and hospitals; • Churches, buildings or premises which are primarily used for public worship; and • Approved caravan sites. The energy charge varies neither with the level of consumption nor the time of day. However, customers on this tariff are also eligible for the off-peak tariffs.
Residential time-of-use (TOU) network[10]	Network access charge (c/day/customer) Energy at max times, ie 7am to 9am and 5pm to 8pm every day (c/kWh) Energy at mid times, ie 9am to 5pm and 8pm to 10pm every day (c/kWh) Energy at economy times, ie all other times (c/kWh)	This tariff is available to residential customers (as defined above) with a meter able to be read as a time-of-use meter and to electric vehicle recharge facilities on residential premises. The energy charges relate to the supply of network services at various times. Higher rates apply at max or peak times to encourage users to shift their load to off-peak periods. Customers on this tariff are also eligible for the controlled load off-peak tariffs. Residential consumers with a meter with two registers capable of providing time-of-use consumption data from each register may have the time-of-use charges applied separately to each register.
Residential 5000 network	Network access charge (c/day/customer) Energy for the first 60 kWh/day (c/kWh) Energy above 60 kWh/day (c/kWh)	This tariff is designed for residential customers who have large continuous (rather than time controlled) loads, such as electric hot water systems, and consume over 5,000 kWh per annum. The energy charges relate to the supply of network services above and below certain volume thresholds. An inclining block structure applies (ie higher energy rates for the second block of energy). The lower energy rate is limited to consumption up to 60 kWh per day, reflecting a typical domestic usage profile. This is sufficient to cover the energy requirements of many residential consumers.
Residential with heat pump	Network access charge (c/day/customer) Energy for the first 165 kWh/day (c/kWh) Energy above 165 kWh (c/kWh)	This tariff is only available to residential customers with a reverse cycle air conditioner. An inclining block structure applies (ie higher energy rates for the second block of energy). The lower energy rate is set to recover the incremental cost of energy load on the network as a demand management tool to lower winter peak loads and improve utilisation of the network in summer and so improve overall network utilisation.
Off-peak (1) night network	Energy at controlled times, ie between 10 pm and 7 am (c/kWh)	The off-peak (1) night charge is available only to customers utilising a controlled load element, and taking all other energy at residential basic network, residential time-off-use or general network rates. The off-peak (1) night charge is applicable to permanent heat (or cold) storage; electric vehicle recharge; and CNG vehicle gas compression installations. The design

[10] All times for metering are Eastern Standard Time.

Tariff	*Charging parameters*	*Explanation*
		and rating must be acceptable to ActewAGL. The installation must use most energy during the controlled times but may be boosted at the principal charge, or charges, at other times. The off-peak (1) night network energy charge relates to supply of network services at controlled times, for 6 to 8 hours per day between the hours of 10 pm and 7 am.
Off-peak (3) day and night network	Energy at controlled times, ie between 10 pm and 7 am and 9 am and 5 pm (c/kWh)	Available only to customers utilising a controlled load element, and taking all other energy at residential basic network, residential time-off-use or general network rates. This charge is applicable to permanent heat (or cold) storage installations. The design and rating must be acceptable to ActewAGL. The off-peak (3) day and night network energy rate applies to power supplied for up to 13 hours per day between 10 pm and 7 am and again between 9 am and 5 pm.
Renewable generation	Energy charges (c/kWh)	This tariff applies to customers with grid connected solar or wind energy generation systems. Different arrangements apply to customers participating in the ACT feed-in tariff scheme, in accordance with the *Electricity Feed-in (Renewable Energy Premium) Act 2008* (ACT). Net metering applies to new PV installations since July 2013.

For each of the tariffs shown in this table (other than off-peak and renewable energy) two separate codes will apply – one which includes a meter capital charge and one which excludes the meter capital charge (XMC). The basis for the separate meter capital charges is explained in section 3.2 below.

2.1.2 Network tariffs for low voltage commercial customers

ActewAGL Distribution sets different tariffs for commercial low voltage (LV) and commercial high voltage (HV) customers recognising the different costs associated with supplying each group. Within the commercial LV tariff class a range of tariff options has been developed to meet the diverse needs of commercial customers and to accommodate their differing load profiles and ability to respond to price signals. Of the four main options offered to commercial LV customers, all but the *General network* tariff involve time-of-use charges. The *General network* tariff does, however, involve an inclining block tariff structure with higher energy charge (c/kWh) applying above a threshold of 330 kWh per day (about 10 MWh per month). Also, the off-peak (controlled load) tariffs are available to customers on the *General network* tariff.

Two of the commercial LV options involve capacity and/or maximum demand charges, in conjunction with time-of-use charges. Customers able to improve their load factor[11] have an incentive to choose a tariff with a demand or capacity charge, and reduce their energy bills. Customers on the *General network* and *General time-of-use network* charges can move to the demand charges and lower their network costs if they have a sufficiently large load (for the cost savings to offset the higher cost of interval metering) and a reasonable load profile.

[11] The load factor is the ratio of average load to peak load (maximum demand).

Table 2-2 Network tariff structure - commercial low voltage

Tariff	*Charging parameters*	*Explanation*
General network	Network access charge (c/day/customer) Energy for the first 330 kWh/day (c/kWh) Energy above 330 kWh/day (c/kWh)	This tariff is available to all customers. The tariff is most suitable for small commercial consumers operating in regular business hours or larger customers with poorer load factors (peaky loads). This tariff may be used in conjunction with the off-peak tariffs.
General TOU network	Network access charge (c/day/customer) Energy at business times* (c/kWh) Energy at evening times (c/kWh) Energy at off-peak times (c/kWh)	This tariff is particularly suitable for small commercial customers with discretionary or relatively large off-peak loads such as bakers, freezer installations and irrigators. The energy charges relate to supply of network services at different times.
LV TOU kVA demand network	Network access charge (c/day/connection point). Maximum demand (in billing period) (c/kVA/day) Energy at business times* (c/kWh) Energy at evening times (c/kWh) Energy at off-peak times (c/kWh)	This tariff is appropriate for customers with an average or stable commercial load. The maximum demand charge is designed to encourage consumers to manage their demand upon the network. The energy charges relate to supply of energy at different times, with lower rates in off-peak times reflecting the availability of capacity and encouraging consumers to shift their load from peak to off-peak times to utilise the available capacity.
LV TOU capacity network	Network access charge (c/day/connection point) Maximum demand (in billing period) (c/kVA/day) Capacity (max demand in last year) (c/kVA/day) Energy at business times* (c/kWh) Energy at evening times (c/kWh) Energy at off-peak times (c/kWh)	This tariff is open to all low voltage consumers and intended to reward those customers with seasonally stable loads. It is prescribed for low voltage customers with embedded generation. The tariff provides an incentive for customers with embedded generation to manage their output and their down-times (eg for servicing) so as to minimise their demand on the network.
Streetlighting	Network access charge (c/day/customer) Energy at any time (c/kWh)	This tariff applies to the night-time lighting of streets and public ways and places.
Small unmetered loads	Network access charge (c/day/customer) Energy at any time (c/kWh)	This tariff applies to eligible installations as determined by ActewAGL, including: • telephone boxes • telecommunication devices • other, as determined by the National Metrology Coordinator. Energy charges are calculated based on the assessed rating of the load and the charge period.

* Business times are between 7 am and 5 pm Eastern Standard Time on weekdays. Evening times are between 5 pm and 10 pm Eastern Standard Time on weekdays. Off-peak times are all other times.

For each of the tariffs shown in this table (except small unmetered loads), two separate codes will apply – one which includes a meter capital charge and one which excludes the meter capital charge (XMC). The basis for the separate meter capital charges is explained in section 3.2 below.

2.2 Network tariffs for high voltage customers

To qualify for the high voltage demand network charges, consumers must take their energy at high voltage (nominal voltage not less than 11 kV) and make a capital contribution towards their connection assets and transformers. High voltage consumers have the option of owning and operating their own high voltage assets. Some customers have aggregated their load, incorporating part of ActewAGL Distribution's low voltage network to become a high voltage customer. A separate high voltage network charge is available for such customers.

Customers taking their energy at high voltage also have the option of selecting the network tariffs available to low voltage consumers. For example, a high voltage customer with a poor load factor could select the *General* or the *General time-of-use* network charge.

Table 2-3 Network tariff structure - high voltage

Tariff (code)	*Charging parameters*	*Explanation*
HV TOU Demand Network (111)	Network access charge (c/day/connection point) Max demand (in billing period) (c/kVA/day) Capacity (max demand in past year) (c/kVA/day) Energy at business times* (c/kWh) Energy at evening times (c/kWh) Energy at off-peak times (c/kWh)	This tariff is appropriate for large customers taking supply at high voltage with a low voltage network owned and maintained by ActewAGL. The energy charges relate to supply of network services at different times, with lower rates in off-peak times encouraging customers to increase their utilisation of the network in off-peak periods. The demand charge is applied to the maximum demand in the billing period while the capacity charge is applied to the maximum demand in the previous 12 months. The capacity charge encourages consumers to monitor and manage their peak demand over the year while the demand charge continues to encourage consumers to manage their demand requirements each month.
HV TOU Demand Network – Customer HV (112)	Network access charge (c/day/connection point) Max demand (in billing period) (c/kVA/day) Capacity (max demand in past year) (c/kVA/day) Energy at business times* (c/kWh) Energy at evening times (c/kWh) Energy at off-peak times (c/kWh)	This tariff is appropriate for large customers taking supply at high voltage with a low voltage network owned and maintained by ActewAGL, where the customer owns and is responsible for their high voltage assets (including transformers and switch gear).
HV TOU Demand Network – Customer LV (121)	Network access charge (c/day/connection point) Max demand (in billing period) (c/kVA/day) Capacity (max demand in past year) (c/kVA/day) Energy at business times* (c/kWh) Energy at evening times (c/kWh) Energy at off-peak times (c/kWh)	This network charge is appropriate for large customers taking supply at high voltage where the customer owns and is fully responsible for their own low voltage network. The network access charge relates to the connection services provided to the customer including provision of the current transformer necessary to meter these large loads. The capacity charge encourages the consumer to monitor and manage their peak demand over the year while the demand charge continues to encourage consumers to manage their capacity requirements each month. The energy charges relate to supply of network services at different times, with lower rates in off-peak times reflecting the relatively low costs of off-peak supply, and thereby providing incentives for customers to switch their utilisation of the network to off-peak periods.
HV TOU Demand Network – Customer HV and LV (122)	Network access charge (c/day/connection point) Max demand (in billing period) (c/kVA/day) Capacity (max demand in past year) (c/kVA/day) Energy at business times* (c/kWh) Energy at evening times (c/kWh) Energy at off-peak times (c/kWh)	This network charge is appropriate for large customers taking supply at high voltage where the customer owns and is fully responsible for their own low voltage network and where the customer owns and is responsible for their high voltage assets (including transformers and switch gear).

* Business times are between 7 am and 5 pm Eastern Standard Time on weekdays. Evening times are between 5 pm and 10 pm Eastern Standard Time on weekdays. Off-peak times are all other times.

2.2.1 Ancillary network charges

In addition to the network tariffs set out above, ActewAGL Distribution offers a range of ancillary network services. The structure of each ancillary service charge depends on the type of service. Some services are charged on a per visit basis, others per installation or per test. The charges for ancillary network services are set on a cost reflective basis, in accordance with the AER's Final Decision[12]. For example, separate rates apply for temporary connections depending on whether they relate to an overhead or underground connection, as these will involve different costs. Ancillary network services and metering services charges are discussed further in chapter 3.

2.3 Network charges for 2015/16

ActewAGL Distribution's network charges for 2015/16 are made up of distribution charges, transmission charges, jurisdictional scheme charges and metering capital charges. The distribution charges recover the cost of ActewAGL's electricity distribution service within the ACT. The transmission charges recover TransGrid's charges to ActewAGL for the delivery of energy to the ACT and most of ActewAGL Distribution's costs for sub-transmission services.

The AER regulates both ActewAGL's distribution charges and TransGrid's transmission charges. Also, the National Electricity Rules (NER) provide that ActewAGL Distribution is to recover the cost of jurisdictional schemes including the ACT feed-in tariff, the Utilities Network Facilities Tax and the Energy Industry Levy in its network charges.

Furthermore, the AER in its Final Decision required ActewAGL Distribution to charge new customers the full cost of their meter. Customers that have paid up front for their meter would not be required to contribute towards the capital cost of meters provided to other consumers and who had not initially paid up-front for their meters.

To facilitate that change, the AER split metering charges into two components: one to recover the capital costs and the other to recover metering operating and maintenance cost. To apply these charges in the manner that the AER has determined ActewAGL Distribution included the capital metering cost in the network charges for existing customers. New customers that have paid for their meter would be placed on a network charges that excluded metering capital charges (XMC tariffs) and would pay only the non-capital component of the metering charge.

Table 2-4 shows the AER approved distribution, transmission, jurisdictional scheme, metering capital and network charges for 2015/16, excluding GST.

Table 2-4 Network use of system charges 2015/16 (excluding GST)

Description	Unit	Distribution Charges 2015/16	Transmission Charges 2015/16	Jurisdictional Charges 2015/16	Metering Capital 2015/16	Network Charges 2015/16
RESIDENTIAL TARIFFS						
10 Residential Basic Network						

[12] AER 2015, *Final Decision, ActewAGL distribution determination 2015-16 to 2018-19*, Attachment 16

Network access charge	cents/day	25.26	0.00	0.00	7.53	32.79
Energy consumption	cents/kWh	3.4337	2.3494	1.0169		6.80
11 Residential Basic Network XMC*						
Network access charge	cents/day	25.26	0.00	0.00		25.26
Energy consumption	cents/kWh	3.4337	2.3494	1.0169		6.80
15 Residential TOU Network						
Network access charge	cents/day	25.2600	0.0000	0.0000	7.53	32.79
Energy at max times	cents/kWh	9.0264	1.4624	1.2712		11.76
Energy at mid times	cents/kWh	3.6605	1.0026	1.0169		5.68
Energy at economy times	cents/kWh	1.1095	0.7045	0.7560		2.57
16 Residential TOU Network XMC						
Network access charge	cents/day	25.26	0.00	0.00		25.26
Energy at max times	cents/kWh	9.0264	1.4624	1.2712		11.76
Energy at mid times	cents/kWh	3.6605	1.0026	1.0169		5.68
Energy at economy times	cents/kWh	1.1095	0.7045	0.7560		2.57
20 Residential 5000 Network						
Network access charge	cents/day	46.46	0.00	0.00	7.53	53.99
Energy for the first 60 kWh per day	cents/kWh	2.1483	2.1148	1.0169		5.28
Energy above 60 kWh per day	cents/kWh	3.4337	2.3494	1.0169		6.80
21 Residential 5000 Network XMC						
Network access charge	cents/day	46.46	0.00	0.00		46.46
Energy for the first 60 kWh per day	cents/kWh	2.1483	2.1148	1.0169		5.28
Energy above 60 kWh per day	cents/kWh	3.4337	2.3494	1.0169		6.80
30 Residential with Heat Pump Network						
Network access charge	cents/day	89.16	0.00	0.00	7.53	96.69
Energy for the first 165 kWh per day	cents/kWh	0.7128	2.1003	1.0169		3.83
Energy above 165 kWh per day	cents/kWh	3.4337	2.3494	1.0169		6.80
31 Residential with Heat Pump Network XMC						
Network access charge	cents/day	89.16	0.00	0.00		89.16
Energy for the first 165 kWh per day	cents/kWh	0.7128	2.1003	1.0169		3.83
Energy above 165 kWh per day	cents/kWh	3.4337	2.3494	1.0169		6.80
60 Off-Peak (1) Night Network						
Energy consumption	cents/kWh	0.0752	1.1700	0.6048		1.85
70 Off-Peak (3) Day & Night Network						
Energy consumption	cents/kWh	0.3455	1.6285	0.7560		2.73
Renewable Energy Generation						
Gross metered energy	cents/kWh	0.0000	0.0000	0.0000		0.00
Net metered energy	cents/kWh					
COMMERCIAL LOW VOLTAGE TARIFFS						
40 General Network						
Network access charge	cents/day	46.34	0.00	0.00	13.17	59.51
Energy for the first 330 kWh per day	cents/kWh	6.2588	3.2943	1.0169		10.57
Energy above 330 kWh per day	cents/kWh	9.4040	3.3291	1.0169		13.75
41 General Network XMC						
Network access charge	cents/day	46.34	0.00	0.00		46.34
Energy for the first 330 kWh per day	cents/kWh	6.2588	3.2943	1.0169		10.57
Energy above 330 kWh per day	cents/kWh	9.4040	3.3291	1.0169		13.75
135 Small Unmetered Loads Network						
Network access charge	cents/day	37.70	0.00	0.00		37.70

Energy consumption	cents/kWh	9.1386	1.1933	0.7091		11.04
80 Streetlighting Network						
Network access charge	cents/day	46.83	0.00	0.00	13.17	60.00
Energy consumption	cents/kWh	5.2259	0.9570	1.0271		7.21
81 Streetlighting Network XMC						
Network access charge	cents/day	46.83	0.00	0.00		46.83
Energy consumption	cents/kWh	5.2259	0.9570	1.0271		7.21
90 General TOU Network						
Network access charge	cents/day	46.34	0.00	0.00	13.17	59.51
Energy at business times	cents/kWh	13.1995	2.1665	1.3440		16.71
Energy at evening times	cents/kWh	6.0580	1.1251	1.0169		8.20
Energy at off-peak times	cents/kWh	2.4464	0.2155	0.7281		3.39
91 General TOU Network XMC						
Network access charge	cents/day	46.34	0.00	0.00		46.34
Energy at business times	cents/kWh	13.1995	2.1665	1.3440		16.71
Energy at evening times	cents/kWh	6.0580	1.1251	1.0169		8.20
Energy at off-peak times	cents/kWh	2.4464	0.2155	0.7281		3.39
Low voltage time of use demand network						
101 LV TOU kVA Demand Network						
Network access per connection point	cents/day	50.30	0.00	0.00	106.30	156.60
Maximum demand charge	c/KVA/day	28.8278	12.8722	0.0000		41.70
Energy at business times	cents/kWh	2.5423	2.5437	1.3440		6.43
Energy at evening times	cents/kWh	1.7642	0.6489	1.0169		3.43
Energy at off-peak times	cents/kWh	0.7742	0.0377	0.7281		1.54
103 LV TOU Capacity Network						
Network access per connection point	cents/day	50.30	0.00	0.00	106.30	156.60
Maximum demand charge	c/KVA/day	16.4805	3.0195	0.0000		19.50
Capacity charge	c/KVA/day	16.4805	3.0195	0.0000		19.50
Energy at business times	cents/kWh	3.8270	1.2590	1.3440		6.43
Energy at evening times	cents/kWh	2.0975	0.3156	1.0169		3.43
Energy at off-peak times	cents/kWh	0.7969	0.0150	0.7281		1.54
104 LV TOU kVA Demand Network XMC						
Network access per connection point	cents/day	50.30	0.00	0.00		50.30
Maximum demand charge	c/KVA/day	28.8278	12.8722	0.0000		41.70
Energy at business times	cents/kWh	2.5423	2.5437	1.3440		6.43
Energy at evening times	cents/kWh	1.7642	0.6489	1.0169		3.43
Energy at off-peak times	cents/kWh	0.7742	0.0377	0.7281		1.54
105 LV TOU Capacity Network XMC						
Network access per connection point	cents/day	50.30	0.00	0.00		50.30
Maximum demand charge	c/KVA/day	16.4805	3.0195	0.0000		19.50
Capacity charge	c/KVA/day	16.4805	3.0195	0.0000		19.50
Energy at business times	cents/kWh	3.8270	1.2590	1.3440		6.43
Energy at evening times	cents/kWh	2.0975	0.3156	1.0169		3.43
Energy at off-peak times	cents/kWh	0.7969	0.0150	0.7281		1.54
HIGH VOLTAGE TARIFFS						
High voltage time of use demand network with ActewAGL low voltage network						
111 HV TOU Demand Network						
Network access per connection point	$/day	19.00	0.00	0.00		19.00
Maximum demand charge	c/KVA/day	9.6337	7.0663	0.0000		16.70

Capacity charge	c/KVA/day	9.6337	7.0663	0.0000	16.70
Energy at business times	cents/kWh	1.6444	1.6285	1.3171	4.59
Energy at evening times	cents/kWh	1.0811	0.5823	0.9966	2.66
Energy at off-peak times	cents/kWh	0.3802	0.0163	0.7135	1.11
112 HV TOU Demand Network – Customer HV					
Network access per connection point	$/day	19.00	0.00	0.00	19.00
Maximum demand charge	c/KVA/day	8.6337	7.0663	0.0000	15.70
Capacity charge	c/KVA/day	8.6337	7.0663	0.0000	15.70
Energy at business times	cents/kWh	1.6444	1.6285	1.3171	4.59
Energy at evening times	cents/kWh	1.0811	0.5823	0.9966	2.66
Energy at off-peak times	cents/kWh	0.3802	0.0163	0.7135	1.11
High voltage time of use demand network without ActewAGL low voltage network					
121 HV TOU Demand Network – Customer LV					
Network access per connection point	$/day	19.00	0.00	0.00	19.00
Maximum demand charge	c/KVA/day	9.6337	7.0663	0.0000	16.70
Capacity charge	c/KVA/day	9.6337	7.0663	0.0000	16.70
Energy at business times	cents/kWh	1.2484	1.6245	1.3171	4.19
Energy at evening times	cents/kWh	0.7346	0.5788	0.9966	2.31
Energy at off-peak times	cents/kWh	0.2416	0.0149	0.7135	0.97
122 HV TOU Demand Network – Customer HV and LV					
Network access per connection point	$/day	19.00	0.00	0.00	19.00
Maximum demand charge	c/KVA/day	12.2155	3.4845	0.0000	15.70
Capacity charge	c/KVA/day	12.2155	3.4845	0.0000	15.70
Energy at business times	cents/kWh	2.0669	0.8060	1.3171	4.19
Energy at evening times	cents/kWh	1.0277	0.2857	0.9966	2.31
Energy at off-peak times	cents/kWh	0.2503	0.0062	0.7135	0.97

* XMC tariffs exclude metering capital charges.

2.4 Changes in network charges in 2015/16

Network charges will decrease by 11.9 per cent, on average, in 2015/16 mainly as a result of the 16.2 per cent reduction in ActewAGL Distribution's DUOS charges. Charges related to jurisdictional schemes are expected to rise 1.0 per cent in 2015/16 and TUOS charges have increased 0.6 per cent, thereby moderating the overall decrease.

Table 2-5 shows the AER approved network charges for 2014/15 and 2015/16, excluding GST. To keep the charges comparable, the meter charges have been included. The table also shows the amount of the average decrease in prices and the percentage average decrease in prices.

High voltage charges do not include metering capital charges as ActewAGL Distribution does not provide metering services to these customers. XMC tariffs that exclude metering capital are not shown as there were no XMC tariff customers in 2014/15.

Table 2-5 Change in network use of system charges 2014/15 to 2015/16

Description	Unit	Network& metering charges 2014/15	Network& metering charges 2015/16	Average Change c/kWh	Average Change %
RESIDENTIAL TARIFFS					
10 Residential Basic Network				-0.84	-8.7%
Network access charge	cents/day	36.50	36.50		
Energy consumption	cents/kWh	7.64	6.80		
15 Residential TOU Network				-0.69	-6.9%
Network access charge	cents/day	36.50	36.50		
Energy at max times	cents/kWh	10.34	11.76		
Energy at mid times	cents/kWh	6.80	5.68		
Energy at economy times	cents/kWh	4.78	2.57		
20 Residential 5000 Network				-0.84	-7.5%
Network access charge	cents/day	57.70	57.70		
Energy for the first 60 kWh per day	cents/kWh	6.12	5.28		
Energy above 60 kWh per day	cents/kWh	7.64	6.80		
30 Residential with Heat Pump Network				-0.84	-12.1%
Network access charge	cents/day	100.40	100.40		
Energy for the first 165 kWh per day	cents/kWh	4.67	3.83		
Energy above 165 kWh per day	cents/kWh	7.64	6.80		
60 Off-Peak (1) Night Network				-0.34	-15.5%
Energy consumption	cents/kWh	2.19	1.85		
70 Off-Peak (3) Day & Night Network				-0.17	-5.9%
Energy consumption	cents/kWh	2.90	2.73		
Renewable Energy Generation					
Gross metered energy	cents/kWh	0.00	0.00	0.00	
COMMERCIAL LOW VOLTAGE TARIFFS					
40 General Network				-1.24	-9.5%
Network access charge	cents/day	66.00	66.00		
Energy for the first 330 kWh per day	cents/kWh	11.81	10.57		
Energy above 330 kWh per day	cents/kWh	14.99	13.75		
135 Small Unmetered Loads Network				-1.09	-8.8%
Network access charge	cents/day	37.70	37.70		
Energy consumption	cents/kWh	12.128	11.041		
80 Streetlighting Network				-0.96	-11.7%
Network access charge	cents/day	66.33	60.00		
Energy consumption	cents/kWh	8.17	7.21		
90 General TOU Network				-1.12	-10.3%
Network access charge	cents/day	66.00	66.00		
Energy at business times	cents/kWh	18.02	16.71		
Energy at evening times	cents/kWh	9.33	8.20		
Energy at off-peak times	cents/kWh	4.34	3.39		
Low voltage time of use demand network					
101 LV TOU kVA Demand Network				-0.88	-10.0%
Network access per connection point	cents/day	238.00	209.00		
Maximum demand charge	c/KVA/day	48.60	41.70		
Energy at business times	cents/kWh	6.01	6.43		

Energy at evening times	cents/kWh	4.24	3.43		
Energy at off-peak times	cents/kWh	2.14	1.54		
103 LV TOU Capacity Network				-0.76	-10.4%
Network access per connection point	cents/day	238.00	209.00		
Maximum demand charge	c/KVA/day	22.70	19.50		
Capacity charge	c/KVA/day	22.70	19.50		
Energy at business times	cents/kWh	6.01	6.43		
Energy at evening times	cents/kWh	4.24	3.43		
Energy at off-peak times	cents/kWh	2.14	1.54		
HIGH VOLTAGE TARIFFS					
High voltage time of use demand network with ActewAGL LV network					
111 HV TOU Demand Network				-0.97	-14.5%
Network access per connection point	$/day	19.00	19.00		
Maximum demand charge	c/KVA/day	19.10	16.70		
Capacity charge	c/KVA/day	19.10	16.70		
Energy at business times	cents/kWh	4.76	4.59		
Energy at evening times	cents/kWh	3.27	2.66		
Energy at off-peak times	cents/kWh	1.94	1.11		
112 HV TOU Demand Network – Customer HV					
Network access per connection point	$/day	19.00	19.00		
Maximum demand charge	c/KVA/day	18.20	15.70		
Capacity charge	c/KVA/day	18.20	15.70		
Energy at business times	cents/kWh	4.76	4.59		
Energy at evening times	cents/kWh	3.27	2.66		
Energy at off-peak times	cents/kWh	1.94	1.11		
High voltage time of use demand network without ActewAGL LV network					
121 HV TOU Demand Network – Customer LV				-0.92	-15.5%
Network access per connection point	$/day	19.00	19.00		
Maximum demand charge	c/KVA/day	19.10	16.70		
Capacity charge	c/KVA/day	19.10	16.70		
Energy at business times	cents/kWh	4.36	4.19		
Energy at evening times	cents/kWh	2.92	2.31		
Energy at off-peak times	cents/kWh	1.80	0.97		
122 HV TOU Demand Network – Customer HV and LV				-1.34	-15.4%
Network access per connection point	$/day	19.00	19.00		
Maximum demand charge	c/KVA/day	18.20	15.70		
Capacity charge	c/KVA/day	18.20	15.70		
Energy at business times	cents/kWh	4.36	4.19		
Energy at evening times	cents/kWh	2.92	2.31		
Energy at off-peak times	cents/kWh	1.80	0.97		

3 Charges for metering and ancillary services

3.1 Ancillary services

Table 3-1shows ActewAGL Distribution's approved charges for ancillary services and its connection service charges for 2015/16, excluding and including GST. In accordance with the AER's Final Decision, ancillary service charges for 2015/16 charges have been increased or decreased to bring them into line with the cost of providing each service.

Table 3-1 Charges for ancillary and connection services 2015/16

Code	Description	Unit	Proposed Prices excl GST 2015/16	Proposed Prices incl.GST 2015/16
Premise Re-energisation – Existing Network Connection -These charges also apply where ActewAGL responds to a customer initiated call out and determines that the premise is energised at the connection point.				
501	Re-energise premise – Business Hours	per visit	$66.07	$72.68
502	Re-energise premise – After Hours	per visit	$83.75	$92.13
Premise De-energisation – Existing Network Connection				
503	De-energise premise – Business Hours	per visit	$66.07	$72.68
505	De-energise premise for debt non-payment	per test	$132.14	$145.35
Meter installation				
507	Install single phase, single element manually read interval meter	per meter	$500.92	$551.01
508	Install subsequent single phase, single element meter - same location & visit	per meter	$316.68	$348.35
509	Install single phase, two element meter	per meter	$609.18	$670.10
511	Install subsequent single phase, two element meter - same location & visit	per meter	$424.94	$467.43
512	Install three phase meter	per meter	$733.51	$806.86
513	Install subsequent three phase meter - same location & visit	per meter	$549.26	$604.19
Meter Investigations				
504	Meter Test (Whole Current) – Business Hours	per test	$264.28	$290.71
510	Meter Test (CT/VT) – Business Hours	per test	$306.07	$336.68
Special metering services				
506	Special Meter Read	per read	$30.56	$33.62
Temporary Network Connections				
520	Temporary Builders Supply – Overhead (Business Hours) (excludes meter cost)	per installation	$593.84	$653.22
522	Temporary Builders Supply – Underground (Business Hours) (excludes meter costs)	per installation	$1,296.40	$1,426.04
New Network Connections				
523	New Underground Service Connection – Greenfield	per installation	$0.00	$0.00
526	New Overhead Service Connection – Brownfield (Business Hours)	per installation	$779.95	$857.95
527	New Underground Service Connection – Brownfield from Front	per installation	$1,296.40	$1,426.04
528	New Underground Service Connection – Brownfield from Rear	per installation	$1,296.40	$1,426.04
Network Connection Alterations and Additions				

541	Overhead Service Relocation – Single Visit (Business Hours)	per installation	$744.42	$818.86
542	Overhead Service Relocation – Two Visits (Business Hours)	per installation	$1,488.84	$1,637.72
543	Overhead Service Upgrade – Service Cable Replacement Not Required	per installation	$744.42	$818.86
544	Overhead Service Upgrade – Service Cable Replacement Required	per installation	$779.95	$857.95
545	Underground Service Upgrade – Service Cable Replacement Not Required	per installation	$1,260.88	$1,386.97
546	Underground Service Upgrade – Service Cable Replacement Required	per installation	$1,296.40	$1,426.04
547	Underground Service Relocation – Single Visit (Business Hours)	per installation	$1,296.40	$1,426.04
548	Install surface mounted point of entry (POE) box	per installation	$599.55	$659.51
Temporary De-energisation				
560	Temporary de-energisation – LV (Business Hours)	per occurrence	$396.42	$436.06
561	Temporary de-energisation – HV (Business Hours)	per occurrence	$396.42	$436.06
Supply Abolishment / Removal				
562	Supply Abolishment / Removal – Overhead (Business Hours)	per site visit	$558.32	$614.15
563	Supply Abolishment / Removal - Underground (Business Hours)	per site visit	$1,008.70	$1,109.57
Miscellaneous Customer Initiated Services				
564	Install & Remove Tiger Tails – Per Installation (Business Hours)	per installation	$1,311.10	$1,442.21
565	Install & Remove Tiger Tails - Per Span (Business Hours)	per installation	$660.02	$726.02
566	Install & Remove Warning Flags – Per Installation (Business Hours)	per installation	$1,116.63	$1,228.29
567	Install & Remove Warning Flags - Per Span (Business Hours)	per installation	$565.73	$622.30
Embedded Generation - Operational & Maintenance Fees				
568	Small Embedded Generation OPEX Fees - Connection Assets	per annum	2%	2%
569	Small Embedded Generation OPEX Fees - Shared Network Asset	per annum	2%	2%
Connection Enquiry Processing - PV Installations				
570	PV Connection Enquiry – LV Class 1 (<= 10kW Single Phase / 30kW Three Phase)	per installation	$0.00	$0.00
571	PV Connection Enquiry – LV Class 2 to 5 (> 30kW <= 1500kW Three Phase	per installation	$542.79	$597.07
572	PV Connection Enquiry – HV	per installation	$1,085.58	$1,194.14
573	Provision of information for Network technical study for large scale installations	per installation	$10,855.85	$11,941.44
Network Design & Investigation / Analysis Services - PV Installations				
574	Design & Investigation - LV Connection Class 1 PV (<= 10kW Single Phase / 30kW Three Phase)		$0.00	$0.00
575	Design & Investigation - LV Connection Class 2 PV (> 30kW and <= 60kW Three Phase)	per installation	$3,618.62	$3,980.48
576	Design & Investigation - LV Connection Class 3 PV (> 60 kW and <= 120kW Three Phase)	per installation	$5,427.92	$5,970.71
577	Design & Investigation - LV Connection Class 4 PV (> 120 kW and <= 200kW Three Phase)	per installation	$7,237.23	$7,960.95
578	Design & Investigation - LV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – ActewAGL Network Study	per installation	$10,855.85	$11,941.44
579	Design & Investigation - HV Connection Class 5 PV (>200kW and <= 1500kW Three Phase) – Customer Network Study	per installation	$13,569.81	$14,926.79
Residential Estate Subdivision Services				
580	URD Subdivision Electricity Distribution Network Reticulation - Multi-Unit Blocks	per block	$0.00	$0.00
581	URD Subdivision Electricity Distribution Network Reticulation - Blocks <= 650 m^2	per block	$1,654.00	$1,819.40

582	URD Subdivision Electricity Distribution Network Reticulation - Blocks 650 - 1100m^2 with average linear frontage of 22-25 meters	per block	$2,167.00	$2,383.70
Upstream Augmentation				
585	HV Feeder	per KVA	$35.83	$39.41
586	Distribution substation	per KVA	$20.75	$22.83
Rescheduled Site Visits				
590	Rescheduled Site Visit – One Person	per site visit	$132.14	$145.35
591	Rescheduled Site Visit – Service Team	per site visit	$558.32	$614.15
Trenching charges				
592	Trenching - first 2 meters	per visit	$506.80	$557.48
593	Trenching - subsequent meters	per meter	$117.86	$129.65
Boring charges				
594	Under footpath	per occurrence	$919.32	$1,011.25
595	Under driveway	per occurrence	$1,096.11	$1,205.72

3.2 Metering services charges for 2015/16

As discussed above, the AER's Final Decision requires two types of metering service charges:

- Upfront capital charge (for all new and upgraded meters installed from 1 July 2015); and
- Annual charge comprising of two components:
  - capital —metering asset base recovery; and
  - non-capital —operating expenditure and tax.

For existing regulated meters installed before 30 June 2015, ActewAGL Distribution has paid upfront for the capital costs of these meters which were then added to the asset base and recovered gradually, over the life of the meter, through annual charges.

If a customer with an existing regulated metering connection on their premises receives a regulated type 5 or 6 metering service, they will pay the following charges:

- Capital component of regulated annual metering charge
- Non-capital component of the regulated annual metering charge.

For regulated new meter connections installed after 1 July 2015, the capital costs will be paid upfront by the customer. If a customer has a new regulated metering connection that was installed on their premises after 1 July 2015 and receives a regulated type 5 or 6 metering service, they will pay only the non-capital component of the regulated annual metering charge. As they have already paid for their capital component upfront, the only costs relating to their regulated metering service left to be recovered through annual charges are the non-capital costs.

From 1 July 2017, a customer with an existing regulated metering connection on their premises may choose to switch to a competitive advanced metering service. When they do, they stop paying the non-capital component of the regulated annual metering charge

(as they are not receiving ongoing meter operating and maintenance services from ActewAGL Distribution). However, they will continue to pay to ActewAGL Distribution the capital component of the regulated annual metering charge (as they must, under the AER's Final Decision, continue to make a contribution to recovery of the value of the existing meter asset base).

To facilitate these new metering arrangements, ActewAGL Distribution has included the metering capital charge in its network tariffs. These network tariffs with metering capital charges will apply to customers connected at 30 June 2015.

New customers who have paid up-front for the cost of their meters will not be required to pay the metering capital charge. To facilitate that and maintain records of these customers, ActewAGL Distribution has established, where relevant, new network tariffs that exclude metering capital charges (XMC tariffs). These network tariffs will be applied to new connections that have paid for their metering assets.

These new tariffs ensure that ActewAGL Distribution and Retailers will be able to clearly identify, through the network billing system, which customers have paid for their meters and are therefore not liable for the metering capital charge.

Customers connected at 30 June 2015 will continue to pay the metering capital charge even if they later pay for a new meter (eg for a PV system) or choose, at a later date, to transfer to another metering service provider.

The application of the new charges is summarized in the table below.

Type of customer	Pays ActewAGL metering capital charge	Eligible for XMC tariffs	Pays ActewAGL metering non-capital charges
Existing connection at 30 June 2015, ActewAGL provides metering service.	Yes	No	Yes
Existing connection at 30 June 2015, switches to another metering provider.	Yes	No	No
Existing connection at 30 June 2015, pays for new meter for PV system, ActewAGL	Yes	No	Yes

provides metering service.			
Existing connection at 30 June 2015 pays for new meter for PV system, later switches to another metering provider.	Yes	No	No
New connection (from 1 July 2015) pays for new meter, ActewAGL provides metering service.	No	Yes	Yes
New connection (from 1 July 2015) pays for new meter, switches to another metering provider.	No	Yes	No

The XMC tariffs are similar to the residential and commercial low voltage tariffs but exclude the metering capital cost component. The unmetered loads do not have an XMC tariff because ActewAGL Distribution has not connected meters to these loads. Also, the off-peak network tariffs would not have an equivalent XMC tariff because the metering costs would be associated with the customer's substantive tariff, not the supplementary off-peak tariff. Furthermore, there are no high voltage XMC network tariffs, because high voltage network tariffs exclude metering charges as ActewAGL Distribution have not provided manually read meters to these customers since they have been required to use remotely read (types 1- 4) meters.

3.3 Metering non-capital charges for 2015/16

As discussed above, the AER has set caps for the annual metering non-capital charges in its Final Decision[13]. These charges have been converted into a daily charge by dividing them by 366. Table 4-3 presents the proposed metering non-capital charges for 2015/16. The new annual metering non-capital charges apply to both existing and new metering customers.

[13] AER Final Decision, Attachment 16, (p16-61)

Table 3-2 Metering non-capital charges, 2015/16

Code	Description	Unit	Excluding GST 2015/16	Including GST 2015/16
MP1	**Quarterly basic metering rate**			
	Accumulation and time-of-use meters read quarterly	cents per day per NMI*	3.710	4.081
MP2	**Monthly basic metering rate**			
	Accumulation and time-of-use meters read monthly	cents per day per NMI	6.490	7.139
MP3	**Time-of-use metering rate**			
	Time-of-use meters read monthly	cents per day per NMI	6.490	7.139
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	0.524	0.576
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	14.950	16.445

*National Meter Identifier.

The main change to the metering services offered in 2015/16 is the splitting of the metering service charge into two components: the metering capital, and the metering non-capital components. The combined capital and non-capital metering charges are 15.7 per cent lower than metering charges in 2014/15. The non-capital metering charge alone is 72 per cent lower than the metering charges in 2014/15.

The AER's newly determined up-front charges for new and upgrade meters for 2015/16 are included in Table 3-1 (codes 507-513).

3.4 Metering capital charges for 2015/16

The new metering capital charges are shown below in Table 3-3 and were added to the network charges in Table 2-4. These are the amounts approved in the AER's Final Decision reduced to a daily charge by dividing them by 366. ActewAGL Distribution has not included the capital charge for manually read interval meters as no customers have chosen to take up this charge.

ActewAGL Distribution has not included the capital charge for manually read interval meters because there are no existing customers (nor retailers) that have chosen to take up this metering charge to obtain the interval data. If customers on the quarterly basic metering rate they were to change to the interval metering rate, they would pay the quarterly manually read interval metering non-capital rate and retain the quarterly basic metering capital rate.

Table 3-3 Metering capital charges, 2015/16

Code	Description	Unit	Prices 2015/16
MP7	**Quarterly basic metering capital rate**		
	Accumulation and time-of-use meters read quarterly	cents per day per NMI*	7.53
MP8	**Monthly basic metering capital rate**		
	Accumulation and time-of-use meters read monthly	cents per day per NMI	13.17
MP9	**Time-of-use metering capital rate**		
	Time-of-use meters read monthly	cents per day per NMI	13.17
MP10	**Monthly manually-read interval metering capital rate**		
	Interval meters recording at either 15- or 30-minute intervals, read manually and processed monthly	cents per day per NMI	106.30

*National Meter Identifier.

4 Expected price trends

4.1 Expected distribution price trends

Table 4-1 presents ActewAGL Distribution's indicative DUOS charges for 2016/17 to 2018/19. These prices are based on the AER's Final Decision of X factors of 3 per cent for 2016/17, 2.5 per cent for 2017/18 and 2.0 per cent for 2018/19. The CPI is assumed to be 2.38 per cent in each year.

Table 4-1 Indicative distribution use of system charges 2016/17 to 2018/19 (excluding GST)

Code	Description	Unit	2016/17	2017/18	2018/19
10	**Residential Basic Network**				
	Network access charge	cents/day	24.60	24.56	24.64
	Energy consumption	cents/kWh	3.34	3.34	3.35
15	**Residential TOU Network**				
	Network access charge	cents/day	24.60	24.56	24.64
	Energy consumption at max times	cents/kWh	8.79	8.78	8.81
	Energy consumption at mid times	cents/kWh	3.57	3.56	3.57
	Energy consumption at economy times	cents/kWh	1.08	1.08	1.08
20	**Residential 5000 Network**				
	Network access charge	cents/day	45.25	45.17	45.32
	Energy consumption for the first 60 kWh per day	cents/kWh	2.09	2.09	2.10
	Energy consumption above 60 kWh per day	cents/kWh	3.34	3.34	3.35
30	**Residential with Heat Pump Network**				
	Network access charge	cents/day	86.85	86.69	86.98
	Energy consumption for the first 165 kWh per day	cents/kWh	0.69	0.69	0.70
	Energy consumption above 165 kWh per day	cents/kWh	3.34	3.34	3.35
40	**General Network**				
	Network access charge	cents/day	45.14	45.06	45.21
	Energy consumption for the first 330 kWh per day	cents/kWh	6.10	6.09	6.11
	Energy consumption above 330 kWh per day	cents/kWh	9.16	9.14	9.17
60	**Off-Peak (1) Night Network**				
	Energy consumption	cents/kWh	0.07	0.07	0.07
70	**Off-Peak (3) Day & Night Network**				
	Energy consumption	cents/kWh	0.34	0.34	0.34
80	**Streetlighting Network**				
	Network access charge	cents/day	45.61	45.53	45.68
	Energy consumption	cents/kWh	5.09	5.08	5.10

90	**General TOU Network**				
	Network access charge	cents/day	45.14	45.06	45.21
	Energy consumption at business times	cents/kWh	12.86	12.83	12.88
	Energy consumption at evening times	cents/kWh	5.90	5.89	5.91
	Energy consumption at off-peak times	cents/kWh	2.38	2.38	2.39
Low voltage time of use demand network					
101	**LV TOU kVA Demand Network**				
	Network access charge per connection point	cents/day	48.99	48.91	49.07
	Maximum demand charge	c/KVA/day	28.08	28.03	28.12
	Energy consumption at business times	cents/kWh	2.48	2.47	2.48
	Energy consumption at evening times	cents/kWh	1.72	1.72	1.72
	Energy consumption at off-peak times	cents/kWh	0.75	0.75	0.76
103	**LV TOU Capacity Network**				
	Network access charge per connection point	cents/day	48.99	48.91	49.07
	Maximum demand charge	c/KVA/day	16.05	16.02	16.08
	Capacity charge	c/KVA/day	16.05	16.02	16.08
	Energy consumption at business times	cents/kWh	3.73	3.72	3.73
	Energy consumption at evening times	cents/kWh	2.04	2.04	2.05
	Energy consumption at off-peak times	cents/kWh	0.78	0.77	0.78
High voltage time of use demand network with ActewAGL low voltage network					
111	**HV TOU Demand Network**				
	Network access charge per connection point	$/day	$18.51	$18.47	$18.54
	Maximum demand charge	c/KVA/day	9.38	9.37	9.40
	Capacity charge	c/KVA/day	9.38	9.37	9.40
	Energy consumption at business times	cents/kWh	1.60	1.60	1.60
	Energy consumption at evening times	cents/kWh	1.05	1.05	1.05
	Energy consumption at off-peak times	cents/kWh	0.37	0.37	0.37
112	**HV TOU Demand Network – Customer HV**				
	Network access charge per connection point	$/day	$18.51	$18.47	$18.54
	Maximum demand charge	c/KVA/day	8.41	8.39	8.42
	Capacity charge	c/KVA/day	8.41	8.39	8.42
	Energy consumption at business times	cents/kWh	1.60	1.60	1.60
	Energy consumption at evening times	cents/kWh	1.05	1.05	1.05
	Energy consumption at off-peak times	cents/kWh	0.37	0.37	0.37
High voltage time of use demand network without ActewAGL low voltage network					
121	**HV TOU Demand Network – Customer LV**				
	Network access charge per connection point	$/day	$18.51	$18.47	$18.54
	Maximum demand charge	c/KVA/day	9.38	9.37	9.40
	Capacity charge	c/KVA/day	9.38	9.37	9.40
	Energy consumption at business times	cents/kWh	1.22	1.21	1.22
	Energy consumption at evening times	cents/kWh	0.72	0.71	0.72
	Energy consumption at off-peak times	cents/kWh	0.24	0.23	0.24
122	**HV TOU Demand Network – Customer HV and LV**				
	Network access charge per connection point	$/day	18.51	18.47	18.54
	Maximum demand charge	c/KVA/day	11.90	11.88	11.92

	Capacity charge	c/KVA/day	11.90	11.88	11.92
	Energy consumption at business times	cents/kWh	2.01	2.01	2.02
	Energy consumption at evening times	cents/kWh	1.00	1.00	1.00
	Energy consumption at off-peak times	cents/kWh	0.24	0.24	0.24
135	**Small Unmetered Loads Network**				
	Network access charge	cents/day	36.72	36.66	36.78
	Energy consumption	cents/kWh	8.90	8.89	8.92

DUOS charges account for 57 per cent of the network use of system charges in 2015/16. Transmission charges make up 28 per cent and charges for jurisdictional schemes make up 13 per cent and metering capital makes up the remaining 2 per cent. It is expected that charges for jurisdictional schemes will make up a larger share of network use of system charges over the remaining regulatory period in line with the anticipated growth of the large scale feed-in tariff scheme.

4.2 Expected metering price trends

Indicative metering capital and non-capital charges for 2016/17 to 2018/19 are shown in Table 4-2.

Table 4-2 Indicative metering charges 2015/16 to 2018/19 (excluding GST)

Code	Description	Unit	2016/17	2017/18	2018/19
MP1	**Quarterly basic metering rate**				
	Accumulation and time-of-use meters read quarterly	cents per day per NMI*	3.9	4.1	4.3
MP2	**Monthly basic metering rate**				
	Accumulation and time-of-use meters read monthly	cents per day per NMI	6.8	7.2	7.5
MP3	**Time-of-use metering rate**				
	Time-of-use meters read monthly	cents per day per NMI	6.8	7.2	7.5
MP4	**Monthly manually-read interval metering rate**				
	Interval meters recording at either 15- or 30-minute intervals, read manually and processed monthly	cents per day per NMI	55.1	57.8	60.5
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	15.7	16.5	17.3
MP7	**Quarterly basic metering capital rate**				
	Accumulation and time-of-use meters read quarterly	cents per day per NMI*	7.9	8.3	8.7
MP8	**Monthly basic metering capital rate**				

	Accumulation and time-of-use meters read monthly	cents per day per NMI	13.8	14.5	15.2
MP9	**Time-of-use metering capital rate**				
	Time-of-use meters read monthly	cents per day per NMI	13.8	14.5	15.2
MP10	**Monthly manually-read interval metering capital rate**				
	Interval meters recording at either 15- or 30-minute intervals, read manually and processed monthly	cents per day per NMI	111.8	117.1	122.8

*National Meter Identifier.

4.3 Expected ancillary and connection service price trends

Indicative charges for ancillary services for 2016/17 to 2018/19 are shown in Table 4-3. These prices reflect the AER's X factors for each year and forecast inflation of 2.38 per cent per annum.

Table 4-3 Indicative ancillary & connection service charges (excluding GST)

Code	Description	Unit	2016/17	2017/18	2018/19
Premise Re-energisation – Existing Network Connection -These charges also apply where ActewAGL responds to a customer initiated call out and determines that the premise is energised at the connection point.					
501	Re-energise premise – Business Hours	per visit	$68.41	$70.89	$73.46
502	Re-energise premise – After Hours	per visit	$86.71	$89.86	$93.12
Premise De-energisation – Existing Network Connection					
503	De-energise premise – Business Hours	per visit	$68.41	$70.89	$73.46
505	De-energise premise for debt non-payment	per test	$136.81	$141.78	$146.92
Meter installation					
507	Install single phase, single element manually read interval meter	per meter	$516.33	$532.48	$549.13
508	Install subsequent single phase, single element meter - same location & visit	per meter	$326.42	$336.63	$347.16
509	Install single phase, two element meter	per meter	$627.92	$647.56	$667.81
511	Install subsequent single phase, two element meter - same location & visit	per meter	$438.01	$451.71	$465.84
512	Install three phase meter	per meter	$756.07	$779.72	$804.10
513	Install subsequent three phase meter - same location & visit	per meter	$566.16	$583.86	$602.12
Meter Investigations					
504	Meter Test (Whole Current) – Business Hours	per test	$273.63	$283.56	$293.85
510	Meter Test (CT/VT) – Business Hours	per test	$316.90	$328.40	$340.31
Special metering services					
506	Special Meter Read	per read	$31.64	$32.79	$33.98
Temporary Network Connections					
520	Temporary Builders Supply – Overhead (Business Hours) (excludes meter cost)	per installation	$614.84	$637.16	$660.28
522	Temporary Builders Supply – Underground (Business Hours) (excludes meter costs)	per installation	$1,342.25	$1,390.96	$1,441.44
New Network Connections					
523	New Underground Service Connection – Greenfield	per installation	$0.00	$0.00	$0.00
526	New Overhead Service Connection – Brownfield (Business Hours)	per installation	$807.54	$836.84	$867.21
527	New Underground Service Connection – Brownfield from Front	per installation	$1,342.25	$1,390.96	$1,441.44

528	New Underground Service Connection – Brownfield from Rear	per installation	$1,342.25	$1,390.96	$1,441.44
Network Connection Alterations and Additions					
541	Overhead Service Relocation – Single Visit (Business Hours)	per installation	$770.75	$798.72	$827.71
542	Overhead Service Relocation – Two Visits (Business Hours)	per installation	$1,541.50	$1,597.44	$1,655.41
543	Overhead Service Upgrade – Service Cable Replacement Not Required	per installation	$770.75	$798.72	$827.71
544	Overhead Service Upgrade – Service Cable Replacement Required	per installation	$807.54	$836.84	$867.21
545	Underground Service Upgrade – Service Cable Replacement Not Required	per installation	$1,305.48	$1,352.85	$1,401.95
546	Underground Service Upgrade – Service Cable Replacement Required	per installation	$1,342.25	$1,390.96	$1,441.44
547	Underground Service Relocation – Single Visit (Business Hours)	per installation	$1,342.25	$1,390.96	$1,441.44
548	Install surface mounted point of entry (POE) box	per installation	$620.76	$643.28	$666.63
Temporary De-energisation					
560	Temporary de-energisation – LV (Business Hours)	per occurrence	$410.44	$425.34	$440.77
561	Temporary de-energisation – HV (Business Hours)	per occurrence	$410.44	$425.34	$440.77
Supply Abolishment / Removal					
562	Supply Abolishment / Removal – Overhead (Business Hours)	per site visit	$578.07	$599.05	$620.79
563	Supply Abolishment / Removal - Underground (Business Hours)	per site visit	$1,044.38	$1,082.28	$1,121.55
Miscellaneous Customer Initiated Services					
564	Install & Remove Tiger Tails – Per Installation (Business Hours)	per installation	$1,357.47	$1,406.74	$1,457.79
565	Install & Remove Tiger Tails - Per Span (Business Hours)	per installation	$683.36	$708.16	$733.86
566	Install & Remove Warning Flags – Per Installation (Business Hours)	per installation	$1,156.12	$1,198.08	$1,241.56
567	Install & Remove Warning Flags - Per Span (Business Hours)	per installation	$585.74	$607.00	$629.02
Embedded Generation - Operational & Maintenance Fees					
568	Small Embedded Generation OPEX Fees - Connection Assets	per annum	2%	2%	2%
569	Small Embedded Generation OPEX Fees - Shared Network Asset	per annum	2%	2%	2%
Connection Enquiry Processing - PV Installations					
570	PV Connection Enquiry – LV Class 1 (<= 10kW Single Phase / 30kW Three Phase)	per installation	$0.00	$0.00	$0.00
571	PV Connection Enquiry – LV Class 2 to 5 (> 30kW <= 1500kW Three Phase	per installation	$561.99	$582.38	$603.52
572	PV Connection Enquiry – HV	per installation	$1,123.98	$1,164.77	$1,207.04
573	Provision of information for Network technical study for large scale installations	per installation	$11,239.81	$11,647.71	$12,070.41
Network Design & Investigation / Analysis Services - PV Installations					
574	Design & Investigation - LV Connection Class 1 PV (<= 10kW Single Phase / 30kW Three Phase)		$0.00	$0.00	$0.00
575	Design & Investigation - LV Connection Class 2 PV (> 30kW and <= 60kW Three Phase)	per installation	$3,746.61	$3,882.57	$4,023.47
576	Design & Investigation - LV Connection Class 3 PV (> 60 kW and <= 120kW Three Phase)	per installation	$5,619.90	$5,823.85	$6,035.20
577	Design & Investigation - LV Connection Class 4 PV (> 120 kW and <= 200kW Three Phase)	per installation	$7,493.20	$7,765.13	$8,046.93
578	Design & Investigation - LV Connection Class 5 PV (> 200kW and <= 1500kW Three Phase) – ActewAGL Network Study	per installation	$11,239.81	$11,647.71	$12,070.41
579	Design & Investigation - HV Connection Class 5 PV (>200kW and <= 1500kW Three Phase) – Customer Network Study	per installation	$14,049.76	$14,559.63	$15,088.00
Residential Estate Subdivision Services*					
580	URD Subdivision Electricity Distribution Network Reticulation - Multi-Unit Blocks	per block	$0.00	$0.00	$0.00

581	URD Subdivision Electricity Distribution Network Reticulation - Blocks <= 650 m^2	per block	$1,712.50	$1,774.65	$1,839.05
582	URD Subdivision Electricity Distribution Network Reticulation - Blocks 650 - 1100m^2 with average linear frontage of 22-25 meters	per block	$2,243.64	$2,325.07	$2,409.44
Upstream Augmentation**					
585	HV Feeder	per KVA	$37.10	$38.44	$39.84
586	Distribution substation	per KVA	$21.48	$22.26	$23.07
Rescheduled Site Visits					
590	**Rescheduled Site Visit – One Person**	**per site visit**	$136.81	$141.78	$146.92
591	**Rescheduled Site Visit – Service Team**	**per site visit**	$578.07	$599.05	$620.79
Trenching charges					
592	Trenching - first 2 meters	per visit	$524.72	$543.77	$563.50
593	Trenching - subsequent meters	per meter	$122.03	$126.46	$131.05
Boring charges					
594	Under footpath	per occurrence	$951.84	$986.38	$1,022.17
595	Under driveway	per occurrence	$1,134.88	$1,176.06	$1,218.74