

01 April 2019



Contents

1		Introduction	3
	1.1	Purpose of our Tariff Structure Statement	3
	1.2	Scope of our TSS	3
	1.3	Structure of our TSS	4
2		Network tariff classes and tariff assignment	5
	2.1	Network tariff classes for standard control services	5
	2.2	Network tariff assignment process	8
3		Network tariff structures and charging parameters	11
	3.1	Charging parameters	
		Tariff structures	
4		Approach to setting tariffs	14
	4.1	Pricing within stand-alone and avoidable cost	14
		Pricing based on long run marginal costs (LRMC)	
	4.3	Ensuring our tariffs reflect total efficient costs and seek to minimise distortion	. 16
	4.4	Considering customer impacts of tariffs	17
5		Alternative control services	20
	5.1	What are our alternative control services	20
		Fee based and quoted ancillary services	
		/ Metering services	
		ndard Control Services indicative tariffs 2019-2024	
		ernate Control Services indicative tariffs 2019-2024 (excluding GST)	

1 Introduction

This introductory chapter explains the purpose, scope and structure of this document and the supporting explanatory statement.

1.1 Purpose of our Tariff Structure Statement

This Tariff Structure Statement (TSS) relates to Power and Water Corporation's (Power and Water) electricity network tariffs (tariffs) and various user-pays charges we will charge for regulated ancillary services for the period from 1 July 2019 to 30 June 2024. It explains our five-year tariff strategy, outlining what tariffs we will charge, and who will be assigned to which tariffs.

For most customers, changes in our prices currently have no impact on their retail bills. This is because retail pricing protection applies under the Northern Territory (NT) Government's Electricity Pricing Order (the Pricing Order).

1.2 Scope of our TSS

This document is required by the National Electricity (NT) Rules (NT NER – the Rules), and sets out the proposed approach to tariffs that comply with the service classifications set by the Australian Energy Regulator (AER), and the network pricing rule requirements of clause 6.18.1A(a) (tariff structure statement). This TSS also includes, at Appendix A, an indicative pricing schedule as required by NT NER 6.18.1(A)(e).

This TSS is supported by our Tariff Structure Statement | Explanatory statement (explanatory statement) which further details how our TSS and approach to annual tariff setting comply with clause 6.18.5 (pricing principles).

The scope of network services covered by this TSS includes:

- standard control services; and
- alternative control services.

It includes our assignment policy which is used to determine which tariff a customer will be eligible for. It does not cover our charging arrangements for network connection services, these are set out in detail in our Customer Connection Services Policy available on our website.

1.3 Structure of our TSS

We have structured this TSS as follows:

- **Chapter 2** outlines the tariff classes for our common distribution services and our approach to assigning customers to tariffs;
- **Chapter 3** explains our tariff charging parameters and tariff structures;
- Chapter 4 describes how we set compliant tariffs; and
- **Chapter 5** details our alternative control services.

Appendix A provides our indicative tariff schedules for standard control services and alternative control services.

2 Network tariff classes and tariff assignment

This chapter explains the customer groupings (tariff classes) we use for assigning customers to tariffs, the tariffs available within those tariff classes, and the eligibility criteria and assessment process for tariff assignment.

2.1 Network tariff classes for standard control services

Table 1 sets out our tariff classes, and the tariffs that would apply to customers in each tariff class. The tariff classes are grouped by low voltage (LV) and high voltage (HV), and consumption level.

Tariff class	Description of tariffs	
	1 Residential customers consuming <750MWh pa with standard accumulation meters	
	2 Non-residential customers consuming <750MWh pa with standard accumulation meters	
LV <750MWh	3 Customers consuming <750MWh pa with smart meters (i.e. type 4 meters)	
	4 Unmetered supply (for street lighting, traffic lights and other unmetered devices)	
LV >750MWh*	5 Customers connected to the LV network consuming >750MWh pa	
111.74	6 Customers connected to the HV network consuming <750MWh pa	
HV*	7 Customers connected to the HV network consuming >750MWh pa	

Table 1 Network tariff classes

* For sufficiently large and unique new customers for whom a bespoke tariff would best meet the NT NER pricing principles and protect the interests of our existing customers, Power and Water may confidentially determine individually calculated tariffs in accordance with the eligibility arrangements and tariff setting approach set out in this TSS, and would seek AER approval of these in the annual tariff variation process.

2.1.1 Low Voltage <750MWh

A Tariff class assignment

The Low Voltage <750MWh tariff class comprises four categories of customers:

- 1. Tariff 1: residential customers with accumulation meters;
- 2. Tariff 2: non-residential customers with accumulation meters;
- 3. Tariff 3: customers with smart meters (both residential and non-residential); and
- 4. Tariff 4: unmetered supplies.

B Tariff eligibility

Tariff 1 | The **residential tariff** applies to customers supplied at a National Metering Identifier (NMI) point where:

• total electricity consumption is <750MWh per annum per NMI;

- electricity is supplied at a voltage level defined as low voltage nominally 230/400V;
- the customer is connected to the LV network via an accumulation meter; and
- the premises is intended to be used primarily for residential purposes, excluding serviced apartments, but including:
 - electricity used on vacant land zoned for residential (domestic) purposes; and
 - living premises in retirement villages, which must be separately metered.

Tariff 2 | The non-residential tariff is applied to customers where:

- total electricity consumption is <750MWh per annum per NMI;
- electricity is supplied at a voltage level defined as low voltage nominally 230/400V;
- the customer is connected to the LV network via an accumulation meter; and
- the premises is intended to be used for non-residential purposes, including:
 - electricity used on vacant land zoned for commercial purposes;
 - temporary supply (i.e. for construction purposes);
 - motels, hotels, serviced apartments and any form of temporary accommodation;
 - shops, offices, warehouses and industrial/manufacturing plants;
 - mining enterprises; and
 - farms.

Tariff 3 | The LV smart meter tariff is applied to customers where:

- total electricity consumption is <750MWh per annum per NMI;
- electricity is supplied at a voltage level defined as low voltage nominally 230/400V; and
- the customer is connected to the LV network via a smart meter.

Residential and non-residential are treated equally under this tariff.

Tariffs 4 | The **unmetered supply tariff** applies to connection points that, with the agreement of Power and Water, are unmetered (type 7 metering). In these circumstances, the demand at the connection point is estimated.

These standard control service tariffs cover the cost of the standard control services for common distribution costs (energy delivery) and type 7 metering services (energy estimation and administration).

2.1.2 LV >750MWh

A Tariff class assignment

The LV >750MWh tariff class currently has one tariff (Tariff 5) which applies to large use customers.

B Tariff eligibility

Tariff 5 | This is the default tariff for all customers supplied at a NMI point where:

- total electricity consumption is >750MWh per annum per NMI; and
- electricity is supplied at a voltage level defined as low voltage nominally 230 to 400V.

LV individually calculated tariff | In exceptional circumstances, Power and Water may offer an individually calculated tariff. This tariff may be made available to new LV >750MWh connection points or material alternations to existing LV >750MWh connection points where the conditions outlined below hold. It does not apply to existing LV >750MWh connection points.

The circumstances in which we may offer the option of an individually calculated tariff are where the connecting or augmenting party's apparent power requirement is >2MVA, and one or more of the following exists:

- the impact of connection charges should be reflected in a dedicated tariff;
- material network support benefits can be captured and shared; or
- material uneconomic network bypass risk exists.

Any customer offered an individually calculated tariff can still opt for the default tariff (Tariff 5).

2.1.3 HV

A Tariff class assignment

The High Voltage tariff class comprises two categories of customers where electricity is supplied at a voltage level of 11 kilovolts (kV) or higher:

- customers that consume less than 750MWh per annum per NMI; and
- customers that consume more than 750MWh per annum per NMI.

There is no differentiation in relation to the customer's end use.

B Tariff eligibility

Tariff 6 | The **HV <750MWh tariff**, applies to customers supplied at a NMI point where:

- total electricity consumption is <750MWh per annum per NMI; and
- electricity is supplied at a voltage level of 11 kilovolts (kV) or higher.

Tariff 7 | The **HV >750MWh tariff**, applies to customers supplied at a NMI point where:

- total electricity consumption is >750MWh per annum; and
- electricity is supplied at a voltage level of 11 kilovolts (kV) or higher.

HV individually calculated tariff | In exceptional circumstances, Power and Water may offer an individually calculated tariff. This tariff may be made available to new HV >750MWh connection points or material alternations to existing HV >750MWh connection points where the conditions outlined below hold. It does not apply to existing HV >750MWh connection points.

The circumstances in which we may offer the option of an individually calculated tariff are where the connecting or augmenting party's apparent power requirement is >2MVA, and one or more of the following exists:

- the impact of connection charges should be reflected in a dedicated tariff;
- material network support benefits can be captured and shared; or

• material uneconomic network bypass risk exists.

Any customer offered an individually calculated tariff can still opt for the default tariff (Tariff 7).

2.2 Network tariff assignment process

2.2.1 Assignment and reassignment procedures

A Assignment steps

Our assessment process to assign or reassign customers to the appropriate tariff has two steps:

- Step 1 assigning the customer to a tariff class: The customer is assigned to the appropriate tariff class based on the tariff class assignment criteria in section 2.1 above; and
- Step 2 assigning the customer to the appropriate tariff: Once the customer is assigned to the tariff class, the appropriate tariff is determined based on the customer's metering characteristics and end use, specified against the criteria applicable to each tariff in the tariff class, based on the tariff eligibility criteria in section 2.1.1 to 2.1.3 above.

This process and the annually published tariff schedule provide the customer or customer's representative with the necessary information to select the tariff when applying for a tariff assignment or reassignment.

B When assignment occurs

Tariff assignment occurs when:

A new customer connects:

- a customer connects to the network and they are allocated a NMI; and
- where a new connection occurs, we will use the information collected from the customer, the customer's representative or the retailer's business to business (B2B) service request to assign the customer to the appropriate tariff.

A reassignment is triggered:

- following an annual review conducted by us:
 - we will trigger a reassignment as a result of the change in the customer's eligibility; and
 - we will apply the procedure as detailed below to assign the customer to the appropriate tariff for commencement on 1 July.
- following installation of a smart meter that replaces an accumulation meter.
- a customer or their retailer requests a reassignment:
 - where a change of circumstance occurs, the customer or the customer's representative or retailer must notify us in writing advising the change in occupancy using the Tariff Reassignment Request form, to enable us to assign the customer to the appropriate tariff; and

 where the completed request form is received prior to the 15th of the calendar month, and no additional information is required, the new tariff assignment (if approved) will take effect from the commencement of the next billing cycle. The new tariff assignment will not take effect until we advise the applicant in writing of the approval and effective date of the new tariff assignment.

C How assignment occurs

Our procedures for assignment and re-assignment of customers to tariff classes and tariffs are as follows.

When a new customer is assigned to a tariff, that tariff will continue to apply until such time as the reassignment is triggered as a result of a change in the customer's load profile, connection or metering characteristics, and consequently either:

- we initiate the tariff reassignment:
 - where the reassignment is due to changes in annual consumption (after providing the customer or their retailer notice prior to the reassignment as set out in section 2.2.2); or
 - where the reassignment is due to installation of a smart meter that replaces an accumulation meter, Power and Water will notify the retailer through the existing business to business (B2B) process for meter exchange; or
- the customer or the customer's representative applies for a tariff reassignment. Where the customer or the customer's representative wants to make a request for a tariff reassignment, they must apply in writing by using the Tariff Reassignment Request Form. In such cases the customer or the customer's representative will be charged the *Network tariff change request* fee. Note that no fee will apply where the amendment was due to a tariff assignment error made by Power and Water.

Whether the customer, the customer's representative or Power and Water initiates a tariff reassignment, we will use the procedure described below to reassign the customer to the appropriate tariff.

2.2.2 Reassignment initiated by Power and Water

During the regulatory control period, we will review customers' consumption annually. This review will include assessing:

- the customer's consumption level at the NMI, where assessment will be for the prior 12 month period (where available), from 1 February through to 31 January;
- whether the customer's tariff assignment is correct; and
- whether the customer's consumption level warrants priority installation of a smart meter.

Any tariff class and/or tariff reassignment resulting from our annual review, and the resulting new charges, will commence from 1 July.

Where we believe a customer should be reassigned we will notify the customer or retailer directly in writing. The customer or retailer will have an opportunity to comment on the outcomes of this assessment from 1 March through to 31 March.

For new customers, six months after connection we may review their actual consumption to ensure the customer is assigned to the appropriate tariff. In the event we believe a tariff reassignment is required we will notify the customer or retailer directly in writing and provide the customer or retailer with an opportunity to comment on the assessment.

2.2.3 Reassignment initiated by a customer or retailer

Customers and retailers may formally request that we review the assignment applied. Upon payment of the *Network tariff change request* fee we will review and update the tariffs assignment where:

- recent consumption indicates the NMI has moved tariff class, based upon:
 - the latest 12 months of consumption; or
 - where consumption has recently changed permanently, a forecast of the next 12 months consumption based on the latest three months of consumption; or
- the site's primary purpose has changed and its associated consumption level is forecast to change or that the primary purpose has changed from residential to non-residential use.

To formally request a change in assignment, the customer or retailer will need to submit (and pay for)¹ their request by the 15th of the calendar month. We will then:

- undertake the assessment and advise the customer or retailer of their acceptance or rejection in writing. Where the application is not approved, we will advise the applicant of the reasons; and
- where relevant, change the assignment from the start of the next billing cycle.

With regards to unmetered connections and associated deemed billable usage, the customer or retailer will need to submit their request (including detailed information on the change in device or operation and deemed billable usage) by the end of the second calendar month of the quarterly billing cycle. We will then:

- undertake the assessment and advise the customer or retailer of their acceptance or rejection in writing by the 25th of the final month of the billing cycle; and
- change the deemed billable usage from the next billing period.

Where the applicant is someone other than the customer or customer's retailer, the applicant will be required to obtain authorisation from the customer to deal with us on their behalf. The applicant will also take responsibility of communicating the outcome of the tariff reassignment to the customer or retailer.

¹ Note that no fee will apply where the amendment was due to a Power and Water error.

3 Network tariff structures and charging parameters

This chapter explains the different types of charges (charging parameters) we apply and how we adopt different combinations to create the tariff structures within each tariff class.

3.1 Charging parameters

Our tariff structures involve three key charging parameters, as shown in the figure below:

- fixed system access charge (\$ per day);
- energy (volume) charge (\$/kWh) to make up the residual contribution to costs not covered by the other two elements; and
- demand charge to send a long-run marginal cost-based price signal (\$ per kVA).

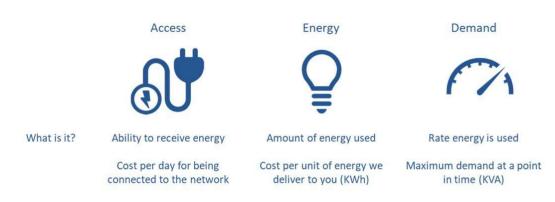


Figure 1 Tariff charging parameters

Not all tariffs include a demand charge, but all tariffs except unmetered supply do include an access charge and a volume (energy) charge. Unmetered supply consists of a volume (energy) only charge.

3.1.1 System access charges

System access charges (SACs) are a fixed daily charge per NMI for connection to our network.

3.1.2 Volume charges

For customers on the residential tariff or non-residential tariff (Tariff 1 or Tariff 2), the anytime \$/kWh charge forms the primary price signalling component of the bill.

For LV smart meter tariff (Tariff 3) customers and customers within the LV >750MWh and HV tariff classes the volumetric charge is also an anytime \$/kWh charge.

For unmetered supply tariff customers the volumetric charge is also an anytime \$/kWh charge.

3.1.3 Demand charges

Our demand charges are based on the time of use and the actual demand. They are measured as maximum kVA per month in the peak window (between 12pm and 9pm on weekdays). We have no demand charges in the off-peak window. Demand charges only apply to customers with meters capable of measuring demand.

3.1.4 Peak and off-peak periods

Our peak period is between 12pm and 9pm on weekdays, including public holidays. All other times are off peak.

For customers on the LV smart meter tariff (Tariff 3), the peak period is seasonal and only applies between 1 October and 31 March with the rest of the year being off peak.

3.1.5 kVAr charge Trial

Power and Water, in its Initial Regulatory Proposal and Revised Regulatory Proposal put forward the proposal that from 2021-22 we should introduce a charge relating to customer's excess kVAr. That is, introduce a financial incentive for customers to ensure that their power factors are meeting minimum requirements as specified in our Network Technical Code.

After feedback from stakeholders and the AER, Power and Water have withdrawn this proposed charge from the proposed TSS. We will continue to investigate and work with stakeholders on how to encourage customers to improve their power factors, including the introduction of financial incentives through a tariff trial.

Power and Water notes that the NT NER provides provisions to introduce a charge under trial conditions using sub-threshold tariffs available under clause 6.18.1C. It may be appropriate for an excess kVAr charge, at some stage during the determination period, to be introduced in accordance with these conditions.

Consistent with our stakeholder engagement and resulting commitments to our customer arising from that engagement, we would not consider introducing a trial before 1 July 2021.

3.2 Tariff structures

The following sections outline the applicable charging parameters for each tariff for the 2019-24 regulatory control period.

Table 2 sets out the charging parameters for our tariffs available within the LV <750MWh tariff class.

Table 2 Low Voltage <750MWh charging parameters

Tariff	SAC	Anytime kWh ¢/kWh	Peak Demand \$/kVA
Tariff 1 Residential	×	×	-
Tariff 2 Non-residential	×	×	-
Tariff 3 LV Smart meter	×	x	×
Tariff 4 Unmetered supply	-	×	-

Table 3 sets out the applicable charging parameters for each tariff for our LV >750MWh tariff class customers and HV class customers.

Table 3 LV >750MWh and HV charging parameters

Tariff	SAC	Anytime kWh ¢/kWh	Peak Demand \$/kVA
Tariff 5 LV >750MWh	×	×	×
Tariff 6 HV <750MWh	×	×	×
Tariff 7 HV >750MWh	×	×	×

3.2.1 Individually calculated customer charges

As noted in section 2.1, we may offer individually calculated tariffs in exceptional circumstances.

The default tariff structure for these tariffs will have an individually calculated system access charge and demand charge. Depending on the customer's circumstances, and our ability to recover a sufficient allocation of residual costs, the tariff structure may also include a volume (kWh energy) tariff.

Power and Water will consider calculating dedicated tariff levels for each charging parameter drawing on the system-wide voltage level long run marginal cost (LRMC) estimates and also the more detailed locational cost data underpinning the incremental cost calculation used in assessing the connection, and any contributions paid by the customer at the time of connection.

Note that individually calculated tariffs will be set to ensure prices are within the stand-alone and avoidable cost boundaries for that individual customer.

4 Approach to setting tariffs

This chapter explains how we set our tariffs both indicatively in this TSS and how we will approach annual tariff setting in a manner compliant with this TSS. We set tariffs by:

- setting the tariffs at levels that ensure the revenue we expect to recover from customers lies between:
 - the stand-alone cost of serving those customers who belong to that tariff class; and
 - the avoidable cost of not serving those customers.
- setting each nominated cost-reflective tariff charging parameter so that it is based on the LRMC of providing services to the customers assigned to that tariff;
- setting our tariffs to reflect the efficient costs of providing the services, including recovering allowed residual costs in a least distortive manner; and
- considering and limiting the customer impact of changes to tariffs.

Further information on our approach to setting tariffs is provided in our explanatory statement.

4.1 Pricing within stand-alone and avoidable cost

As Table 4 shows, we have ensured the revenues we expect to recover from each tariff class are within the efficient pricing bounds required by rule 6.18.5(e). That is, they are:

- more than we would save if we didn't serve those customers our avoidable cost and thereby ensure we are not serving customers through inefficient levels of crosssubsidy; and
- less than the cost those customers would incur to build their own energy solutions stand-alone cost.

		Tariff class	
Revenue and cost measures	LV <750MWh	LV >750MWh	HV
Stand-alone cost	141,247	128,989	48,214
Forecast 2019-20 tariff revenues	116,360	19,039	16,437
Avoidable cost	18,622	10,230	4,934

Table 4 Stand-alone and avoidable cost (\$'000 per year)

4.2 Pricing based on long run marginal costs (LRMC)

Despite the existence of legacy prices and tariff structures that we need to manage customer impacts of transitioning away from, our 2019-24 TSS makes significant advancement in how we reflect LRMC in our tariffs in this regulatory control period as required by rule 6.18.5(f). We have:

- considered updated LRMC estimates in setting our demand charges;
- tested that tariffs without a demand charge are recovering the LRMC estimated for customers on those tariffs;
- introduced demand charges for all customers with smart meters consuming <750MWh per year; and
- removed the inefficient declining block demand tariff structure that previously applied to large users who consume >750MWh per year.

We apply the average incremental cost (AIC) approach to determine the network LRMC for our tariff classes, with the resulting values shown in Table 5.

Table 5 Long-run marginal cost estimates (real \$2018-19)

Tariff class	LRMC - \$/kVA per month
LV <750MWh	\$20.00
LV >750MWh	\$20.00
ни	\$9.50

Using the estimates in Table 5, we have checked that all of our tariffs recover the LRMC estimated to be associated with the forecast chargeable demand of customers on those tariffs. To do so we transformed the LRMC estimates above into a required LRMC tariff for the nominated charging parameter having regard to the customers' coincident demand for demand tariffs and power factor for consumption tariffs, and adjusted for inflation up to the relevant pricing year. Table 6 shows the outcome for 2019-20.

Table 6 Long-run marginal cost revenues (\$Nominal, 2019-20 year)

	SAC daily	Manual Smart Meter		Meter
Tariff		Consumption		Demand
	\$/day	¢/kWh		S/kVA
LV Residential Accumulation	-	3.02	-	-
LV Non Residential Accumulation	-	3.08	-	-
Unmetered Supply	-	3.12	-	-
LV Smart Meter	-	-	-	9.22
HV <750MWh pa	-	-	-	8.27
LV >750MWh pa	-	-	-	17.41
HV >750MWh pa	-	-	-	8.27

4.3 Ensuring our tariffs reflect total efficient costs and seek to minimise distortion

We have ensured our tariffs only recover our total efficient costs as required by rule 6.18.5(g)(2). We have tested that the net present value (NPV) of multiplying our forecast indicative tariffs in this TSS and Australian Energy Market Operator's (AEMO) forecast demand growth rates aligns to the NPV of the building block revenue requirement we have forecast using the AER's post tax revenue model.

If the actual demand over the period differs from AEMO's forecast demand that we have relied on in this TSS, the revenue cap will adjust our annual prices to ensure we only recover our approved efficient costs.

4.3.1 Revenue recovery through non-distortionary charging parameters

Our LRMC-driven costs and associated charging parameters discussed above are not sufficient to recover our total efficient costs. This is because our allowed total efficient costs include the recovery of both variable or growth costs (called marginal costs) *and* our fixed costs which, together, allow us to recover our average costs.

We have a lot of fixed costs in providing network services. This means we have to recover residual costs (the difference between marginal costs and our allowed revenues determined by the AER). We seek to set our tariffs to recover residual costs in a way that:

 minimises distortions to efficient price signals, by aiming to keep demand tariffs in line with our LRMC estimates;

- preferences residual cost recovery through the fixed daily system access charge where this can be done while managing bill impacts, and seeks to reduce reliance on energy consumption charges; and
- considers the impact of residual costs on customer bills, and whether these bill impacts will distort usage decisions (including whether the Pricing Order will prevent bill impacts), as discussed below.

We have given effect to this tariff setting approach in our proposed indicative tariffs for 2019-20 (the first year of the TSS period). This means further rebalancing within the regulatory period will be minimal and arise mainly through managing the adjustments for under and over recoveries under the revenue cap in a manner that manages customer bill impacts.

Our recovery of our residual costs across our tariffs and tariff charging parameters in 2019-20 is shown in the figure below.

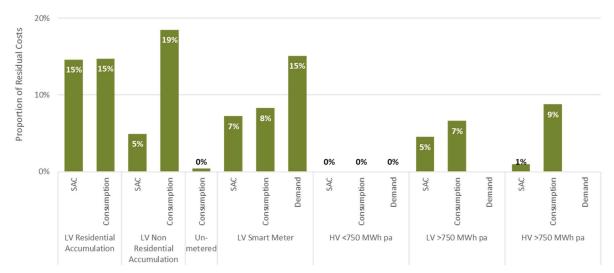


Figure 2 Residual cost recovery shares by tariff and tariff charging parameter

4.4 Considering customer impacts of tariffs

Managing customer impacts is a key focus of our tariff design as required by rule 6.18.5(h). The Pricing Order means we have two distinct types of retail customers with differing price impacts.

4.4.1 Customers who use <750MWh per year

Most of our 85,000 customers, comprising households and small to medium businesses, are subject to retail pricing protection, so our TSS pricing decisions will not directly affect their retail electricity bills.

4.4.2 Customers who use >750MWh per year

Our 200 largest energy users see our network tariffs as a separate line item on their retail bill. Our network prices will directly affect these customers. We sought to manage our tariff changes to minimise customer impacts and ensure that as a group this cohort of customers are no worse off.

Our large user tariff impact analysis for the first year of our regulatory control period relative to 2018-19 is shown in the figure below. This shows the impact on the network component of the bill. As the network charge only makes up a proportion of the total bill, the percentage impact on the customers' final bill will be significantly less.

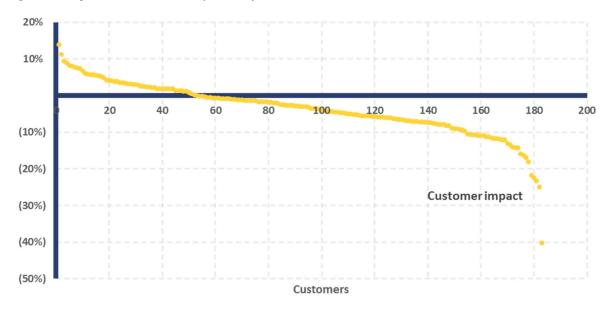


Figure 3 – Large user customer bill impact analysis

4.4.3 Customer network bill impacts

The following table shows indicative network bill impacts for our different illustrative customer types. These impacts are based on our proposed revenue forecasts and the tariffs set out in this TSS. They do not account for the effects of the Pricing Order or retail bills.

	Netwo	rk Bill+	II+ Bill Movement	
Customer Type	2018-19	2019-20*	\$	%
Small Residential - average energy - Accumulation Meter (8,500kWh pa)	1,093	875	(219)	(20%)
Small Residential - average energy - Smart Meter (8,500kWh pa)	1,093	1,022	(71)	(7%)
Large Residential Accumulation Meter (15,000kWh pa)	1,808	1,318	(489)	(27%)
Large Residential Smart Meter (15,000kWh pa)	1,808	1,380	(427)	(24%)
Non-residential Accumulation Meter (30,000kWh pa)	3,407	3,425	18	1%
Smart Meter (30,000kWh pa) (non- residential)	3,407	2,342	(1,065)	(31%)
Industrial (1,000,000kWh pa - LV)	90,547	92,579	2,033	2%
Large Industrial (6,000,000kWh pa - HV)	290,369	271,783	(18,586)	(6%)

Table 7 Movement in customers' network bills 2018-19 to 2019-20 (excluding GST)

* Includes ACS Metering

4.4.4 Indicative tariffs

Our indicative prices over the next regulatory control period are available at Appendix A.

We note that where further required revenue movements arise within the TSS period that are not contemplated in this TSS (e.g. under and over recoveries under the revenue cap or changes in the AER's final determination) any further rebalancing would focus on:

- Continuing to progress our demand tariffs closer to our TSS LRMC estimates for HV customers and LV customers with annual consumption >750 MWh while managing bill impacts;
- Examining the role of demand charges in recovering residual costs (i.e. as we have more customers on demand charges, and have better data about the demand patterns of these customers, we may need to include some residual cost recoveries on our demand charges); and
- Directing any required revenue reductions to lower energy consumption tariffs for <750 MWh customers.

5 Alternative control services

This section outlines the alternative control services that we will provide during the 2019-24 regulatory control period, and explains how charges for these will be structured and varied over that period. Note all fees shown in this chapter exclude GST (unless otherwise stated).

5.1 What are our alternative control services

We provide our customers a range of services in addition to our standard energy delivery service. We charge a user pays fee for these. These services fall into two service categories:

- fee based and quoted ancillary services; and
- most metering services, covering types 1-6 meters.

We charge for these services using either an approved fee, or a calculated charge using approved unit rates depending on service characteristics. We explain which of these charging methods applies to each service in the following sections.

Our indicative prices for these services over the next regulatory control period are available at Appendix A.

5.2 Fee based and quoted ancillary services

Our fee based ancillary services, their basis of charging for the 2019-24 regulatory control period, and the indicative 2019-20 charges are shown in the table below.

Service group/Activities included	Description	Basis of charging	Indicative 2019-20 charge
Connections Services			
Provision of 3 phase service	A 3-phase service be installed in place of a single- phase. At customer's or retailer's request.	\$/request	1,390.40
Standard temporary builder's connection	Connection and supply of electricity for the purpose of development of a site. Meter is temporary (not a permanent meter). At customer's or retailer's request.	\$/request	652.76
Class 1 & 2 PV service	For processing connections of small PV generation systems to the PWC distribution network At customer's or retailer's request	\$/request	86.53

Table 8 Fee based services*(excludes GST)

Service group/Activities included	Description	Basis of charging	Indicative 2019-20 charge
Class 3 PV Assessment	For approval to connect a large embedded generation system to the PWC distribution network, including: Processing the application; Undertaking the engineering assessment; Developing access agreement; and Issuing of final approval. At customer's or retailer's request.	\$/request	1,178.94
De-energisation/Re-energisation	on		
Temporary disconnection and reconnection – no dismantling	Temporary removal of and reinstatement of service line - no dismantling required. At customer's or retailer's request.	\$/request	283.93
Temporary disconnection and reconnection – physical dismantling	Temporary removal of and reinstatement of service line – physical dismantling required. At customer's or retailer's request.	\$/request	731.79
Complex disconnection	The service is physically dismantled or disconnected at the connection to the network. Network connection includes pillar box, pit or pole top. At customer's or retailer's request.	\$/request	310.28
Disconnection (and final read)	Disconnection (and/or final read) during business hours. Applied: • After customer fails to pay; or • After customer moves out. At retailer's request.	\$/request	66.49
Reconnection	 Reconnection during business hours. Applied: After customer pays outstanding amount owing after being disconnected for non-payment; or After customer moves in. At retailer's request. 	\$/request	66.49
Reconnection - After Hours **	 Reconnection after hours. Applied: After customer pays outstanding amount owing after being disconnected for non-payment; or After customer moves in. At retailer's request. 	\$/request	123.50

Service group/Activities included	Description	Basis of charging	Indicative 2019-20 charge
Other			
Wasted visit fee	Additional costs incurred where service provision could not be undertaken and/or completed as planned due to action or inaction of a network user or their agent. If the crew are unable to undertake their work then the lower of either the requested service fee or the wasted fee charge will apply.	\$/request	152.21
After Hours - non reconnections - uplift 1.23 x business hours charge	After hours work provided by Power Services' crews. This fee does not apply to reconnections. At customer's or retailer's request.	% uplift applied against primary charge	123%
Non Standard Data Services			
Historical data requests	Collection, processing and transfer of higher standard energy data per format. Includes consumption checks and detailed historical data. Can be provided per NMI or per meter. At customer's or retailer's request.	\$/request	195.66
Standing data requests	Provide NMI standing data as outlined in the Electricity Retail Supply Code, similar to the NMI Discovery Service provided interstate. At incoming retailer's request.	\$/request	43.27
Customer transfers	The processing of a customer transfer request as outlined in the Electricity Retail Supply Code. At incoming retailer's request.	\$/request	173.07
Network tariff change request	Applied when the customer or the customer's representative makes a request for a tariff reassignment, and that reassignment is not the result of an assignment error by Power and Water. At customer's or retailer's request.	\$/request	43.27
Miscellaneous Services			
Installation of Minor Apparatus	Temporary installation of minor apparatus such as polyloggers. Data analysis and report supplied if required. At customer's or retailer's request.	\$/request	619.83

* Work is to be undertaken during business hours, Monday to Friday 8am to 4pm, excluding public holidays, unless otherwise stated.

** After hours is Monday to Friday after 4pm, excluding public holidays, and is subject to availability and safety. Work undertaken on public holidays and weekends is treated as a Quoted Service and priced accordingly.

We also provide quoted ancillary services where the costs of providing the service depends on the scope of a particular customer's service request. The table below lists the quoted ancillary services to be provided in the 2019-24 regulatory control period and sets out a short description of each and the indicative 2019-20 charge.

Service group/Activities included	Description	Basis of charging	Indicative 2019- 20 Labour rate
Design related services	Includes design services, the provision of specific information, certification, and review related to power services - Business Hours. At customer's or retailer's request.	\$/hour	154.67
Connection applications	Includes assessing any connection applications (including, but not limited to PV, generation and load), undertaking planning studies and associated technical analysis - Business Hours. At customer's or retailer's request.	\$/hour	154.67
Access permits, oversights and facilitation	Includes issuing access permits or clearances to work for an authorised person on or near distribution systems (LV and HV), confined spaces and switch rooms, substations and the like - Business Hours. At customer's or retailer's request.	\$/hour	154.67
Notices of arrangement and completion notices	Includes the requirement to perform administrative work required by a local council to provide written evidence that arrangements required to supply electricity to a development are in place. A completion notice may also be required when a customer/developer requires documentation confirming progress of work - Business Hours. At customer's or retailer's request.	\$/hour	86.65
Network related property services	Includes the property tenure services related to deeds of agreement, indemnity deeds, leases, easements and other property tenure rights linked to connection or relocation - Business Hours. At customer's or retailer's request.	\$/hour	86.65

Table 9 Quoted services* (excludes GST)

Service group/Activities included	Description	Basis of charging	Indicative 2019- 20 Labour rate
Site establishment services	Includes liaising with AEMO (or NT equivalent) and market participants to establish a NMI in markets systems for new or existing premises where AEMO (or NT equivalent) requires a new NMI and the validation and uploading of network load data. Activities include but not limited to: Site establishment including liaising with the AEMO (or NT Equivalent) for market participants to establish NMI's for market systems; Site alteration update and maintenance of NMI and associated data in market systems; or NMI extinction, processing a customer's request for permanent disconnection and NMI extinction in market systems; & confirming or correcting metering or network billing information due to insufficient or incorrect information - Business Hours. At customer's or retailer's request.	\$/hour	86.65
Network safety services	Includes the DNSP providing traffic control services, fitting of tiger tails, tree pruning, and high load escorts Business Hours.	\$/hour	131.90
Network tariff change request	At customer's or retailer's request. Activities include altering an existing network tariff by conducting load and tariff analysis to ensure the relevant tariff criteria is met. This change request relates to processing IT system changes to reflect a bulk tariff change request such as a large customer with multiple sites - Business Hours. At customer's or retailer's request. Where Power and Water has made an error in tariff assignment, we will correct the assignment free of charge, and this charge will not be applied.	\$/hour	86.65
Planned interruption - customer request	A planned interruption is moved outside business hours Business Hours. At customer's or retailer request	\$/hour	131.90
Performance of a statutory right (access prevented)	Includes a follow up attendance at a customer's premises to perform a statutory right where access was declined or prevented on the initial visit. This includes any costs of arranging security or police services - Business Hours. At customer's or retailer's request.	\$/hour	131.90
Provision of network related training to third parties	Includes the training of third parties to a level of attainment required to obtain specific distribution network access authorisation to the DNSP's network. This may include demonstrating the necessary competency in the DNSP's electricity safety rules - Business hours. At customer's or retailer's request	\$/hour	86.65

Service group/Activities included	Description	Basis of charging	Indicative 2019- 20 Labour rate
Non-standard reporting services	Includes developing meter data provision reporting such as standard data, billing data or load profiles for single requests with more than 5 NMI's. Single data requests with 5 NMI's or less, will be charged the ACS Fee Based charge (Historical Data Request or Standing Data Request) per request - Business Hours. At customer's or retailer's request.	\$/hour	86.65
Services provided for retailer of last resort event	DNSP may be required to provide a number of services when an ROLR event occurs. This includes preparing a list of affected sites, estimating reads for the ROLR event date, preparing final invoices and extracting customer data - Business Hours. At customer's or retailer's request.	\$/hour	86.65
Rectification of illegal connections service	Includes work undertaken by the DNSP to investigate and rectify the fraudulent acquisition of energy at a premises; or intentional consumption of energy at those premises otherwise than in accordance with the energy laws - Business Hours. At customer's or retailer's request.	\$/hour	131.90
Network changes at customer or retailer's request	Includes, modifications, relocation, replacement or installation of network assets, at customer or retailer request - Business Hours. At customer's or retailer's request.	\$/hour	131.90
Annual prepayment meter licensing fee **	Technical support fees per annum for training, trouble shooting, staff support for retailers. Software licence charges on-charged according to customer requirements - Business Hours. At customer's or retailer's request.	\$/hour	86.65

* Work is to be undertaken during business hours, Monday to Friday 8am to 4pm, excluding public holidays, unless otherwise stated.

** Cost of Prepayment meter software will be on charged according to customer requirements. Administrative labour rate to be used to process cost recovery.

All Quoted Services labour rates are business hours only (Monday to Friday 8am to 4pm, excluding public holidays). Quoted Services delivered after hours will be subject to overtime charges in accordance with the relevant enterprise agreements and other applicable employment conditions.

5.3 Metering services

Our alternative control services for Types 1 to 6 metering include two types of services:

- metering service provision; and
- customer requested meter-related services.

5.3.1 Metering service provision

Our metering service provision includes us performing the activities of:

- metering coordinator;
- metering provider including providing, installing, maintaining, inspecting, replacing and testing meters;
- meter reading including scheduled and special meter reads (e.g. move in and move out meter reading, final read on removed meter); and
- meter data services including collection, processing, management, delivery and storage of metering data.

We propose a simple schedule of three metering service provision charges. Assignment to a meter service provision charge is based on whether the customer has a single phase meter, three phase meter or dedicated current transformer or voltage transformer with remote reading (CT and VT meters).

Table 10 ACS metering provision tariffs (excludes GST)

Metering service provision charges (for Types 1 – 6 meters)	Basis of charging	Indicative 2019-20 charge
Single Phase Meters (including Prepayment)	\$/day	0.1671
3 Phase Meters	\$/day	0.1840
Dedicated CT and VT meters	\$/day	0.3117

5.3.2 Customer requested meter-related services

We also offer a range of fee-based metering services where a customer or their retailer requests these. These services are generally of a one-off nature, such as moving a meter, testing its accuracy or providing additional data.

Our customer requested meter-related services are set out in the table below.

Service group/Activities included	Description	Basis of charging	Indicative 2019-20 Labour rate
Special meter test	Specialised equipment to test meter (in laboratory) At customer's or retailer's request	\$/request	297.11
Exchange or replace meter - three phase	Exchange or replace a three phase meter. At customer's or retailers request	\$/request	659.53
Exchange or replace meter - single phase	Exchange or replace a single phase meter. At customer's or retailer's request	\$/request	552.11
Relocation of meter	Relocation of a meter at customer's or retailer's request	\$/request	310.28
Remove meter	Removal of meter from meter panel At customer's or retailer's request	\$/request	310.28
General meter inspection	Non-invasive visual only inspection (in field) At customer's or retailer's request	\$/request	139.04
Special meter read - no appointment	Meter read at a customer's request Outside of the scheduled read cycle Meter is read within 2 days - no specific time At customer's or retailer's request	\$/request	35.33
Special meter read - appointment	Meter read at a customer's request Outside of the scheduled read cycle Meter is read at an agreed day and time At customer's or retailer's request	\$/request	76.43
Meter program change	Changes to tariff that requires meter reprogramming Includes prepaid tariff and time of use At customer's or retailer's request	\$/request	160.40
Prepayment Vending Charge	Fee payable per prepayment meter credit update (per transaction). Payable by the retailer.	\$/request	0.47
Prepayment Meter Support Charge	Retailer initiated prepayment query that does not relate to a system or meter fault that could otherwise have been processed through the prepayment meter portal.	\$/request	65.86

* Work is to be undertaken during business hours, Monday to Friday 8am to 4pm, excluding public holidays, unless otherwise stated.

Appendix A – Indicative pricing schedule (excluding GST)

Standard Control Services indicative tariffs 2019-2024

Chama	Indicative Charge					
Charge	2019-20	2020-21	2021-22	2022-23	2023-24	
System Availability Charge			(\$/day)			
Dollars per day per NMI – LV Residential Accumulation ¹	0.64	0.67	0.70	0.73	0.76	
Dollars per day per NMI – LV Non Residential Accumulation ¹	1.35	1.41	1.47	1.54	1.61	
Dollars per day per NMI –LV Smart Meter ¹	1.35	1.41	1.47	1.54	1.61	
Dollars per day per NMI – HV <750MWh ¹	1.35	1.41	1.47	1.54	1.61	
Energy Charges			(¢/kWh)			
LV Residential Accumulation	6.824	7.135	7.444	7.782	8.136	
LV Non-residential Accumulation	9.570	10.007	10.440	10.914	11.411	
LV Smart Meter	1.540	1.610	1.680	1.756	1.836	
HV <750MWh	1.540	1.610	1.680	1.756	1.836	
Unmetered Supply			(¢/kWh)			
Unmetered Supply	5.506	5.757	6.006	6.279	6.565	
Demand Charges			(\$/kVA)			
LV Smart Meter Peak ²	20.510	21.447	22.376	23.391	24.455	
HV <750MWh Peak ³	9.500	9.934	10.364	10.835	11.327	

[1] National Meter Identifier which is allocated to each customer's connection.

[2] The peak period rates apply to usage between 12pm and 9pm on any weekday, including public holidays from 1 October through 31 March. Off-peak period rates apply at other times.

[3] The peak period rates apply to usage between 12pm and 9pm on any weekday, including public holidays. Off-peak period rates apply at other times.

Table 13 Low Voltage >750MWh Indicative tariffs (excludes GST)

Charge	Basis of	Time veried	Indicative charge				
Charge	charging	Time period	2019-20	2020-21	2021-22	2022-23	2023-24
System Availability Charge	\$ per day per NMI	N/A	70.00	73.20	76.37	79.83	83.46
Plus charges related to	\$/kVA	peak ¹	11.000	11.503	12.001	12.545	13.116
monthly demand	\$/kVA	off peak ¹	-	-	-	-	-
Plus charges related to energy metered	¢/kWh	anytime	2.550	2.666	2.782	2.908	3.040

[1] The peak period rates currently apply to usage between 12pm and 9pm on any weekday, including public holidays. Off-peak period rates apply at other times.

Table 14 High Voltage >750MWh Indicative tariffs (excludes GST)

Chause Basis of		Indicative charge					
Charge	charging	Time period	2019-20	2020-21	2021-22	2022-23	2023-24
System Availability Charge	\$ per day per NMI	N/A	70.00	73.20	76.37	79.83	83.46
Plus charges related to	\$/kVA	peak ¹	8.270	8.648	9.022	9.432	9.861
monthly demand	\$/kVA	off peak ¹	-	-	-	-	-
Plus charges related to energy metered	¢/kWh	anytime	2.550	2.666	2.782	2.908	3.040

[1] The peak period rates currently apply to usage between 12pm and 9pm on any weekday, including public holidays. Off-peak period rates apply at other times.

Alternate Control Services indicative tariffs 2019-2024 (excluding GST)

Metering service provision charges	Basis of	Indicative charge					
(for Types 1 – 6 meters)	charging	2019-20	2020-21	2021-22	2022-23	2023-24	
Single Phase Meters (including Prepayment)	\$/day	0.1671	0.1808	0.1956	0.2116	0.2289	
3 Phase Meters	\$/day	0.1840	0.1991	0.2154	0.2330	0.2520	
Dedicated CT and VT meters	\$/day	0.3117	0.3372	0.3647	0.3946	0.4268	

Table 15 Indicative ACS Metering tariffs (excludes GST)

Table 16 Indicative customer requested fee-based meter-related services* (excludes GST)

Meter service	Basis of	Indicative charge				
	charging	2019-20	2020-21	2021-22	2022-23	2023-24
Special meter test	\$/request	297.11	305.10	314.03	323.60	333.41
Exchange or replace meter – three phase	\$/request	659.53	677.29	697.09	718.33	740.12
Exchange or replace meter - single phase	\$/request	552.11	566.97	583.55	601.33	619.56
Relocation of meter	\$/request	310.28	318.63	327.95	337.94	348.19
Remove meter	\$/request	310.28	318.63	327.95	337.94	348.19
General meter inspection	\$/request	139.04	142.78	146.96	151.44	156.03
Special meter read - no appointment	\$/request	35.33	36.28	37.34	38.48	39.65
Special meter read - appointment	\$/request	76.43	78.49	80.78	83.24	85.77
Meter program change	\$/request	160.40	164.72	169.54	174.70	180.00
Prepayment Vending Charge	\$/request	0.47	0.49	0.50	0.52	0.53
Prepayment Meter Support Charge	\$/request	65.86	67.63	69.61	71.73	73.91

* Work is to be undertaken during business hours, Monday to Friday 8am to 4pm, excluding public holidays, unless otherwise stated.

Table 17 Indicative fee-based service charges (excluding customer requested fee-based meter-related services)* (excludes GST)

	Basis of		Inc	dicative cha	rge	
Service group/Activities included	charging	2019-20	2020-21	2021-22	2022-23	2023-24
Connections Services						
Provision of 3 phase service	\$/request	1,390.40	1,427.83	1469.58	1514.36	1560.29
Standard temporary builder's connection	\$/request	652.76	670.33	689.93	710.95	732.51
Class 1 & 2 PV service	\$/request	86.53	88.86	91.46	94.25	97.11
Class 3 PV Assessment	\$/request	1,178.94	1,210.68	1246.07	1284.05	1322.99
De-energisation / Re-energisation						
Temporary disconnection and reconnection – no dismantling	\$/request	283.93	291.58	300.10	309.25	318.63
Temporary disconnection and reconnection – physical dismantling	\$/request	731.79	751.49	773.46	797.03	821.20
Complex disconnection	\$/request	310.28	318.63	327.95	337.94	348.19
Disconnection (and final read)	\$/request	66.49	65.04	63.48	61.91	60.30
Reconnection	\$/request	66.49	65.04	63.48	61.91	60.30
Reconnection - after hours	\$/request	123.50	120.80	117.91	114.99	112.00
Other						
Wasted visit fee	\$/request	152.21	156.31	160.88	165.78	170.81
After Hours - non reconnections - uplift 1.23 x business hours charge	% multiplier	1.23x	1.23x	1.23x	1.23x	1.23x
Non Standard Data Services						
Historical data requests	\$/request	195.66	200.93	206.81	213.11	219.57
Standing data requests	\$/request	43.27	44.43	45.73	47.12	48.55
Customer transfers	\$/request	173.07	177.73	182.93	188.50	194.22
Network tariff change request	\$/request	43.27	44.43	45.73	47.12	48.55
Miscellaneous services						
Installation of Minor Apparatus	\$/request	619.83	636.51	655.12	675.09	695.56

* Work is to be undertaken during business hours, Monday to Friday 8am to 4pm, excluding public holidays, unless otherwise stated.

Table 18 Indicative quoted service labour rates*(excludes GST)

Service group/Activities included	Basis of charging	Indicative charge				
		2019-20	2020-21	2021-22	2022-23	2023-24
Design related services	\$/hour	154.67	159.11	164.29	169.98	175.82
Connection applications	\$/hour	154.67	159.11	164.29	169.98	175.82
Access permits, oversights and facilitation	\$/hour	154.67	159.11	164.29	169.98	175.82
Notices of arrangement and completion notices	\$/hour	86.65	89.14	92.04	95.23	98.50
Network related property services	\$/hour	86.65	89.14	92.04	95.23	98.50
Site establishment services	\$/hour	86.65	89.14	92.04	95.23	98.50
Network safety services	\$/hour	131.90	135.69	140.11	144.96	149.94
Network tariff change request	\$/hour	86.65	89.14	92.04	95.23	98.50
Planned interruption - customer request	\$/hour	131.90	135.69	140.11	144.96	149.94
Performance of a statutory right (access prevented)	\$/hour	131.90	135.69	140.11	144.96	149.94
Provision of network related training to third parties	\$/hour	86.65	89.14	92.04	95.23	98.50
Non-standard reporting services	\$/hour	86.65	89.14	92.04	95.23	98.50
Services provided for retailer of last resort event	\$/hour	86.65	89.14	92.04	95.23	98.50
Rectification of illegal connections service	\$/hour	131.90	135.69	140.11	144.96	149.94
Network changes at customer or retailer's request	\$/hour	131.90	135.69	140.11	144.96	149.94
Annual prepayment meter licensing fee **	\$/hour	86.65	89.14	92.04	95.23	98.50

* Work is to be undertaken during business hours, Monday to Friday 8am to 4pm, excluding public holidays, unless otherwise stated.

** Cost of Prepayment meter software will be on-charged according to customer requirements. Administrative labour rate to be used to process cost recovery.

Glossary of Terms

Term	Definition
ACS (charges)	Alternative Control Services
ΑΕΜΟ	Australian Energy Market Operator
AER	Australian Energy Regulator
В2В	Automated business to business transactions implemented between Power and Water and licenced NT retailers
CAPEX	Capital Expenditure
ССР	Consumer Challenge Panel
DNSP	Distribution Network Service Provider
GST	Goods and Services Tax
GW	Gigawatt
GWh	Gigawatt hour
нν	High Voltage
kV	Kilovolt
kVA	Kilovolt amperes
kVAr	Kilovolt amperes reactive
kW	Kilowatt
kWh	Kilowatt hour
LRMC	Long Run Marginal Cost
LV	Low Voltage
MVA	Megavolt ampere
MW	Megawatt
MWh	Megawatt hour
NEM	National Electricity Market
NER	National Electricity Rules
NMI	National Metering Identifier
ΟΡΕΧ	Operating expenditure
PV	Photovoltaic
Power and Water	Power and Water Corporation

RoLR	Retailer of Last Resort (Jacana Energy)
SCS (charges)	Standard Control Services
Smart meter	A meter that records energy based on its time of use
TSS	Tariff Structure Statement
WACC	Weighted Average Cost of Capital
UC	Utilities Commission