

An aerial photograph of a large, green, open field, likely a golf course or park. The field is divided into sections by paths and clusters of trees. In the lower half of the image, there are several buildings, including a large white house with a green roof, a smaller red-roofed house, and several smaller structures. A road runs along the bottom edge of the field. The overall scene is lush and green, with a mix of open space and wooded areas.

# Powercor

## 2019 Pricing Proposal



# Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>3</b>
1.1	Our business .....	3
1.2	2019 Network and metering charges .....	5
1.3	Network pricing objectives and principles .....	6
1.4	Summary of changes .....	6
<b>2</b>	<b>TARIFF CLASSES AND DETAILS .....</b>	<b>8</b>
2.1	Tariff classes .....	8
<b>3</b>	<b>STANDARD CONTROL SERVICE CHARGES.....</b>	<b>10</b>
3.1	Distribution charges .....	10
3.2	Designated pricing proposal charges.....	14
3.3	Jurisdictional scheme charges .....	15
3.4	Indicative prices for 2020 .....	15
3.5	Comparison of 2019 Proposed and Indicative Network Tariffs.....	15
<b>4</b>	<b>ALTERNATIVE CONTROL SERVICES.....</b>	<b>17</b>
4.1	Tariff classes .....	17
4.2	Compliance with the AER determination .....	17
4.3	Metering tariff class side constraints .....	18
4.4	Public lighting operation, maintenance and replacement .....	18
<b>A</b>	<b>STANDARD CONTROL SERVICE CHARGES.....</b>	<b>19</b>
<b>B</b>	<b>ALTERNATIVE CONTROL SERVICE CHARGES.....</b>	<b>39</b>
<b>C</b>	<b>GLOSSARY.....</b>	<b>54</b>
<b>D</b>	<b>ATTACHMENTS.....</b>	<b>56</b>

# 1 Introduction

This document, its appendices and attachments comprise our 2019 Pricing Proposal (pricing proposal) to the Australian Energy Regulator (**AER**). It covers all of our direct control services for 2019 in accordance with the National Electricity Rules (**Rules**) and the AER's Final Decision on Powercor's Distribution Determination for the 2016 to 2020 regulatory control period.

Direct control services are divided into two subclasses:

- standard control services - network charges; and
- alternative control services - metering, public lighting and various customer requested service charges.

## 1.1 Our business

We are the most efficient and reliable regional and rural electricity network in Australia, and are one of Victoria's five electricity distributors. We own and manage assets that deliver electricity to more than 810,000 homes and businesses across Melbourne's outer western suburbs, and central and western Victoria.

In servicing Victoria, our primary responsibility is planning, building, operating and maintaining the 'poles and wires' — a strategic community asset and core component of Victoria's energy infrastructure. We seek to do this in a safe, reliable, efficient and prudent manner.

We connect residential and commercial customers to a safe and reliable electricity supply. Our key activities include:

- maintaining network safety and reliability to meet the current power supply needs of our customers;
- extending and upgrading the network so that the future power supply needs of customers are met when required;
- operating the network on a day to day basis;
- connecting new customers to the network;
- maintaining the public lighting system;
- reading electricity meters; and
- providing meter data to retailers.

Our electricity distribution network is vast and complex, covering more than 150,000 square kilometres and traversing difficult and remote terrain in some parts of the state.

Figure 1.1 Powercor facts and figures

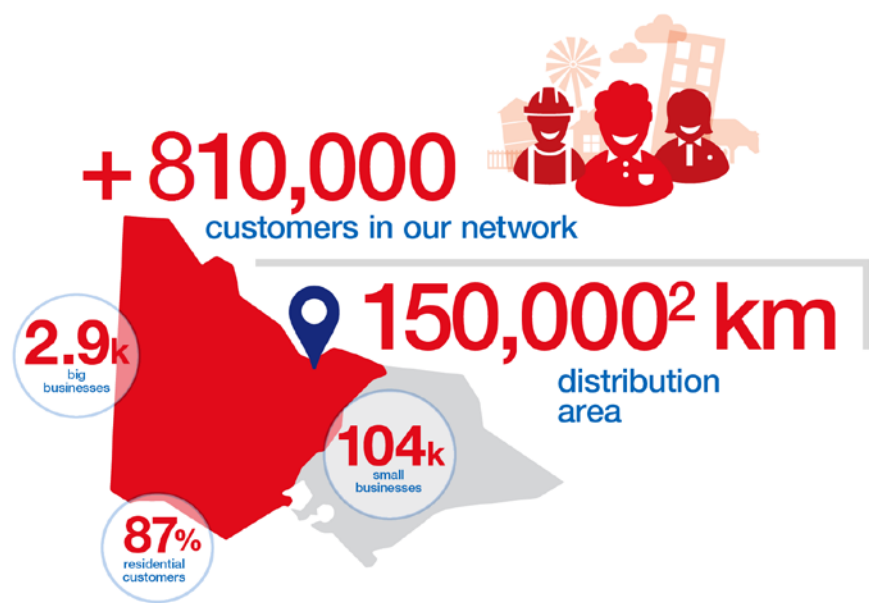
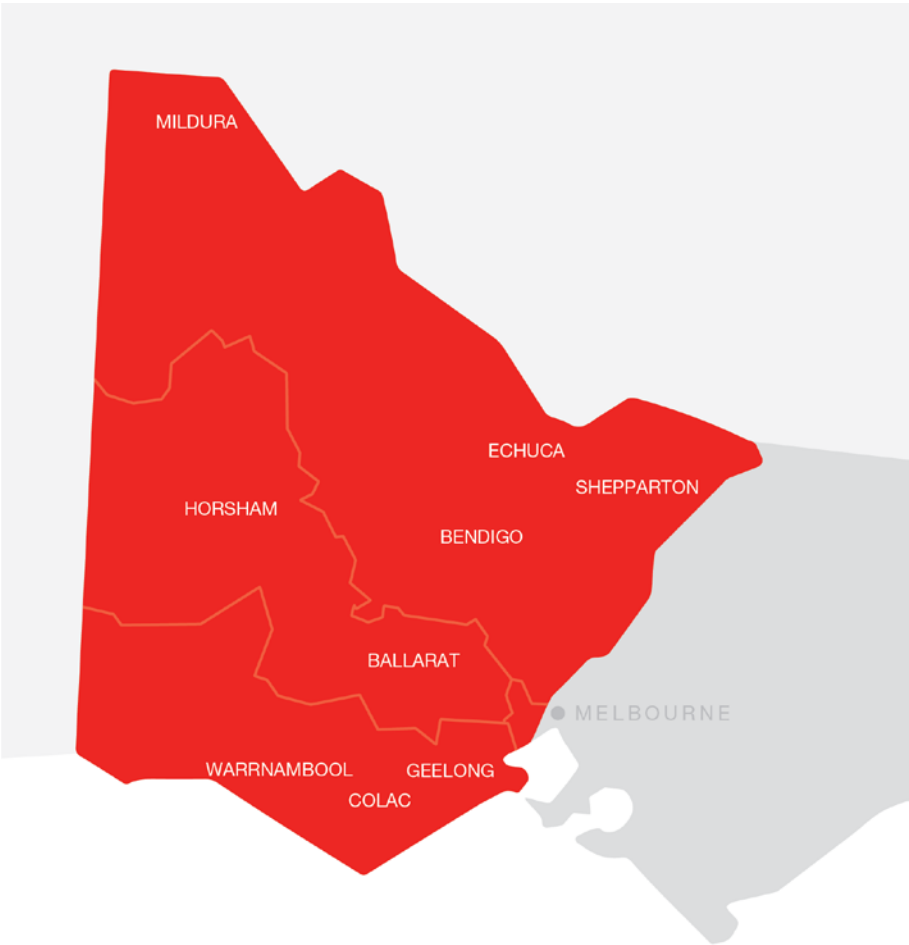


Figure 1.2 Powercor geography



## 1.2 2019 Network and metering charges

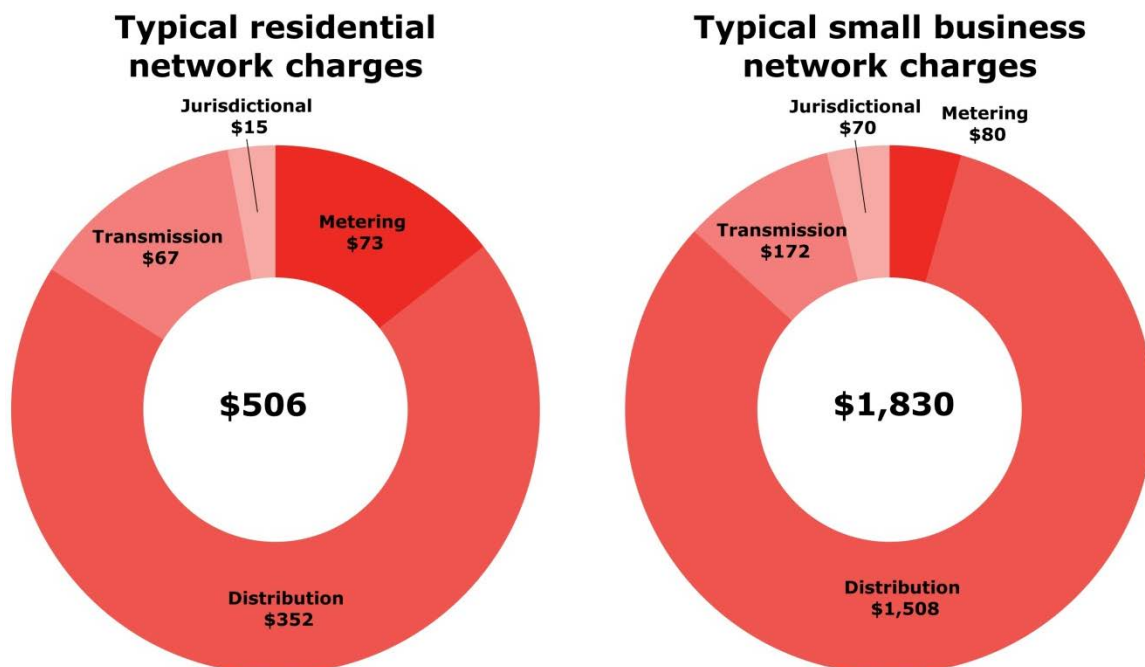
Network tariffs cover the cost of transporting electricity from the generator through the transmission and distribution networks to our customers' homes or businesses.<sup>1</sup> Network tariffs also recover jurisdictional scheme costs (**JUOS**), which are currently limited to the Premium Feed-in Tariff (**PFIT**).

Metering tariffs cover the cost of the meter installation, maintenance and meter data services. We pass network and metering charges on to electricity retailers, who in turn pass them on to customers via electricity bills.

Transmission use of System (**TUOS**) charges reflect the cost to transport electricity over the high voltage network.

Distribution use of System (**DUOS**) charges relate to the cost to deliver electricity to your home or business via Powercor's distribution network.<sup>2</sup>

Figure 1.3 Powercor charges (GST exclusive)



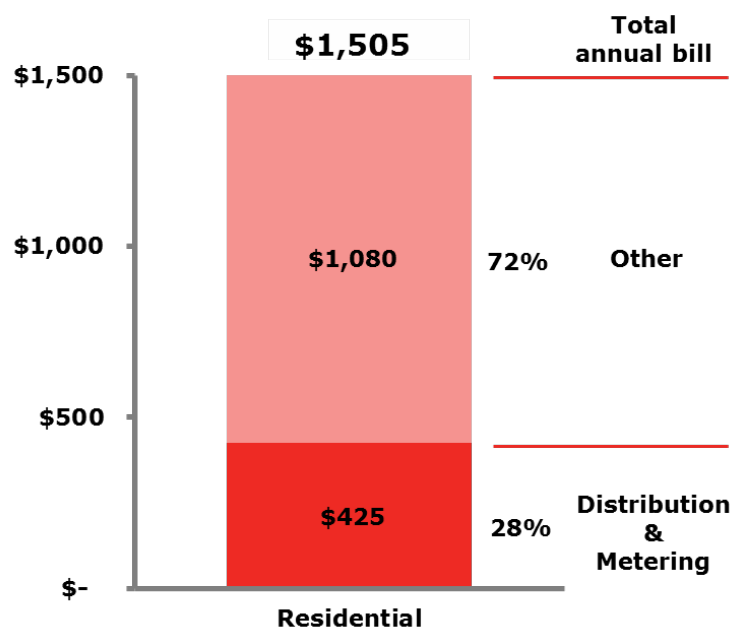
These charges form the network charge component of a customer's bill. Other charges which include wholesale, environmental, retail costs and retail margin make up the other, more significant component of a customer's bill. For example, as seen below, an average residential customer's bill is comprised of 28% distribution and metering charges.<sup>3</sup>

<sup>1</sup> Transmission charges are referred to as designated pricing proposal charges (DPPC) under the Rules.

<sup>2</sup> Network charges are based on a typical customer on a single rate tariff - residential 4,200 kWh pa and small business 20,000 kWh pa.

<sup>3</sup> Network charges are based on a typical residential customer on a 2019 single rate tariff consuming 4,200 kWh pa. Retail charges are an average of AGL, Energy Australia and Origin Energy's 2018 retail offers (ref: St Vincent de Paul Society, Victorian Tariff-Tracking Project July 2018).

Figure 1.4 Powercor residential charges (GST exclusive)



### 1.3 Network pricing objectives and principles

Network tariffs should reflect the efficient costs of providing network services to retail customers.

Our tariffs must comply with the following pricing principles:

- for each tariff class, the revenue expected to be recovered must lie on or between stand-alone and avoidable cost;
- each tariff must be based on the long run marginal cost of providing the service;
- the revenue expected to be recovered from each tariff must reflect the total efficient costs of serving customers and the total revenue should be in accordance with the relevant distribution determination;
- we must consider the impact on retail customers of changes in tariffs from the previous regulatory year;
- our tariffs must be reasonably capable of being understood by customers; and
- our tariffs must comply with the Rules and all applicable regulatory instruments.

On 14 April 2016, changes to the Victorian AMI Tariffs Order were gazetted which only allow a cost-reflective demand tariff to be opt-in for residential and small business customers using less than 40 MWh per annum. The Tariffs Order continues to require us to offer residential customers a flat tariff and a common form flexible time-of-use tariff.

On 12 September 2017 changes to the Victorian AMI Tariffs Order were gazetted which allow medium customers to opt out of a cost reflective flexible AMI retail tariff. This has applied since 1 January 2018.

### 1.4 Summary of changes

In 2019 we propose to re-open the Non-Residential Flexible Pricing tariff P14G. Below, we discuss price movements from 2018 to 2019.

### 1.4.1 Price movements from 2018

Tariff structures over 2017-2020 were proposed in our amended *Revised Tariff Structure Statement* and approved by the AER. Our aim in developing these tariffs was to reduce long-term average charges for using our network by promoting efficient network investment and utilisation.

As reflected in the below table, between 2018 and 2019 tariffs generally increased, albeit marginally.

**Table 1.1** Network price movement from 2018 to 2019

Network tariff	Fixed charge	Peak energy rate	Shoulder energy rate	Off peak energy rate	Demand rate
Residential flat	↑	↑			
Residential ToU	↑	↑		↑	
Residential flexible pricing	↑	↑	↑	↑	
Residential demand	↑	↑			↑
Controlled load				↑	
Small business flat	↑	↓			
Small business ToU	↑	↓		↓	
Small business flexible pricing	↑	↓	↓	↓	
Small business demand	↑	↓			↓
Medium business demand	↑	↓		↑	↑
LLV business (kVA)	↑	↓		↓	↓
HV business (kVA)	↑	↓		↓	↓
Sub-transmission (kVA)	↑	↓		↓	↓
<b>Legend</b>					
↑	Increase relative to the prior year				
↓	Decrease relative to the prior year				
→	No change relative to the prior year				
	A blank cell indicates that the corresponding charging parameter is not applicable for a particular tariff.				

Our 2019 network tariffs are set out in Appendix A.

# 2 Tariff classes and details

This section details our tariff classes and customer groups.

## 2.1 Tariff classes

The grouping of customers into standard control service tariff classes must take into account the following factors:

- the nature and extent of their usage;
- the nature of their connection to the network, such as the voltage of connection; and
- the type of meter installed at the premises.

We do not distinguish between customers with micro-generation and those without, in either the network tariff or network tariff class.

An important consideration in establishing tariff classes is to reduce the complexity of the overall arrangement by grouping customer tariffs with a similar connection and usage profile together on an economically efficient basis.



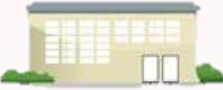


We have categorised standard control services customer tariffs into five tariff classes which remain unchanged from the previous year.

- low voltage residential;
- low voltage business, including unmetered supplies;
- large low voltage;
- high voltage; and
- sub-transmission.

The principles of assignment or reassignment of retail customers between tariff classes is outlined in Attachment 14, section D of the AER's final decision.



Figure 2.1 Tariff classes

	Tariff class	Typical customer	Supply voltage	Annual consumption
	Low voltage residential	Residential	< 1000 V	< 60MWh
	Low voltage business	Small commercial	< 1000 V	< 60MWh
		Medium business	< 1000 V	> 60 MWh
	Large low voltage	Large commercial	< 1000 V	N/A
	High voltage	Industrial	1 kV – 66 kV	N/A
	Sub-transmission	Large industrial	≥66 kV	N/A

Note that the kVA tariff policy, which involves the calculation of 12-month rolling maximum demand, applies to low voltage large, high voltage large and sub-transmission large tariff classes. Further details of how this is calculated is detailed in Appendix A.

# 3 Standard control service charges

This chapter demonstrates how our network tariffs for 2019 comply with the requirements of the Rules and the final determination in respect of the control mechanism and pricing principles.

Our final network charges are bundled charges that encompass the following charges, which are described in detail in the following sections:

- distribution charges;
- designated pricing proposal charges; and
- recovery of jurisdictional scheme amounts.

## 3.1 Distribution charges

### 3.1.1 Control mechanism

For the 2016-2020 regulatory control period, our standard control services are subject to a revenue cap form of control. Attachment 1 of the AER's final decision contains the annual revenue requirements (ARR) for each year of the 2016-2020 regulatory control period. When calculating the ARR for each year, the AER takes into consideration the various costs facing the service provider and the trade-offs and interactions between these costs and service quality over time.

The distributor must propose prices and quantity estimates for a particular year and demonstrate that they do not result in expected revenue which exceeds the total annual revenue allowance for that year. This includes a true-up for any under or over recovery of revenue in prior years.

### 3.1.2 2019 prices for standard control services

Attachment 14 of the AER's final decision sets out the formula for calculating the total annual revenue allowance (TAR). The derivation of the TAR constraint is summarised in the table below.

Table 3.1 Total allowable revenue criteria summary

Criterion	2019 value (\$,000)
Adjusted annual smoothed revenue requirement for the year before the regulatory year t ( $AAR_{t-1}$ )	630,136
Annual percentage change in the Australian Bureau of Statistics' Consumer Price Index ( $\Delta CPI_t$ )	2.08%
X factor for each year of the 2016-2020 regulatory control period as determined in the PTRM ( $X_t$ )	-3.02%
S factor determined in accordance with the service target performance incentive scheme ( $S_t$ )	-0.10%
Adjusted annual smoothed revenue requirement for regulatory year t ( $AAR_t$ )	662,018
Annual adjustment f-factor scheme amount ( $I_t$ )	4,639
Final carryover amount from prior regulatory period from the Demand Management Incentive Scheme ( $T_t$ )	0
Incorporates the recovery of license fee charges, under or over-recovery of DUoS charge revenue and AER approved pass through for direct control services ( $B_t$ ) <sup>4</sup>	-11,163
Total annual revenue ( $TAR_t$ )	655,494

### 3.1.3 Tariff class side constraints

The side constraint formula applied to the weighted average revenue raised for each tariff class for this regulatory control period is set out in Attachment 14 of the AER's final decision. The evaluation of the side constraint for 2019 is set out in the table below.

<sup>4</sup> More specifically,  $B_t$  is the sum of:

- the recovery of license fee charges by the Victorian Essential Services Commission indexed by one and a half years of interest.
- any under or over-recovery of actual revenue is to be collected through DUoS charges in regulatory year t-2 as calculated using the method in Appendix A, attachment 14 of the AER's final decision
- the AER approved pass through amounts in respect of direct control services (positive or negative) with respect to regulatory year t

Table 3.2 Side constraint criteria summary

Criterion	2019 value
Annual percentage change in the Australian Bureau of Statistics' Consumer Price Index ( $\Delta CPI_t$ )	2.08%
X factor for each year of the 2016-2020 regulatory control period as determined in the PTRM ( $X_t$ )	-3.02%
S factor determined in accordance with the service target performance incentive scheme ( $S_t$ )	-0.10%
Annual percentage change from the f-factor scheme amount ( $I_t$ )	0.45%
Annual percentage change from the final carryover amount from the application of the Demand Management Incentive Scheme from the 2011-15 regulatory period ( $T_t$ )	0.00%
Incorporates the annual percentage change of the recovery of license fee charges, under or over-recovery of DUoS charge revenue and AER approved pass through for direct control services ( $B_t$ ) <sup>5</sup>	-1.02%
Maximum allowable tolerance	2.00%
<b>Side constraint</b>	<b>6.59%</b>

### Weighted average revenue

To demonstrate compliance with the side constraint formula, the following table sets out the expected weighted average revenue for standard control services and the per cent change from 2018 to 2019 for each tariff class.

Table 3.3 Weighted average revenue

Tariff class	2018 $p_{t-1}q_t$ \$'000	2019 $p_tq_t$ \$'000	% change
Residential	267,891	271,960	1.52%
Small commercial	156,435	165,715	5.93%
Large low voltage	154,300	155,353	0.68%
High voltage	53,933	54,768	1.55%
Sub-transmission	7,560	7,684	1.64%

<sup>5</sup> More specifically,  $B_t$  is the annual percentage change from the sum of:

- the recovery license fee charges by the Victorian Essential Services Commission indexed by one and a half years of interest.
- any under or over recovery of actual revenue collected through DUoS charges in regulatory year t-2 as calculated using the method in Appendix A, attachment 14 of the final decision
- AER approved pass through amounts in respect of direct control services (positive or negative) with respect to regulatory year t



### 3.1.4 Compliance with pricing principles

This section demonstrates our compliance with the pricing principles set out in clause 6.18.5 of the Rules, which require us to ensure that the revenue recovered for each tariff class lies between:

- an upper bound, representing the stand-alone cost of serving customers who belong to that class; and
- a lower bound, representing the avoidable cost of not serving those customers.

The stand-alone and avoidable cost methodologies are used to calculate the revenues for each standard control service tariff class associated with each cost methodology. These costs are compared with the weighted average revenue derived from our proposed tariffs.

These two categories of cost may be defined as follows:

- **the stand-alone cost** comprises of both the capital and operating costs of service provision. The stand-alone network capital cost for each tariff class was derived from an estimate of the proportions of the cost of providing network infrastructure that would need to remain in place to service the load in each tariff class if the other tariff classes were no longer required to be supplied. The stand-alone operating cost for a tariff class has been estimated as the total of all operating cost less the avoidable operating costs of serving all the other tariff classes; and
- **the avoidable cost** for a tariff class is defined as the cost that would be avoided should the distribution business no longer serve that specific tariff class (whilst all other tariff classes remain supplied). If a tariff class were to be charged below the avoidable cost, it would be economically efficient for the business to stop supplying that tariff class as the associated costs would exceed the revenue obtained from the customer. Further, where avoidable costs are higher than revenue recovered, the associated tariff levels may also result in inefficient levels of consumption, which therefore provides a rationale for having avoidable costs as a lower bound.

### 3.1.5 Long run marginal costs

Long run marginal cost (**LRMC**) is a measure of the change in the forward looking costs as output increases when all factors of production including plant and equipment are variable. The LRMC for electricity distribution will relate broadly to the annualised cost of augmenting capacity (at a particular voltage, location, and time), generally per unit of additional capacity provided.

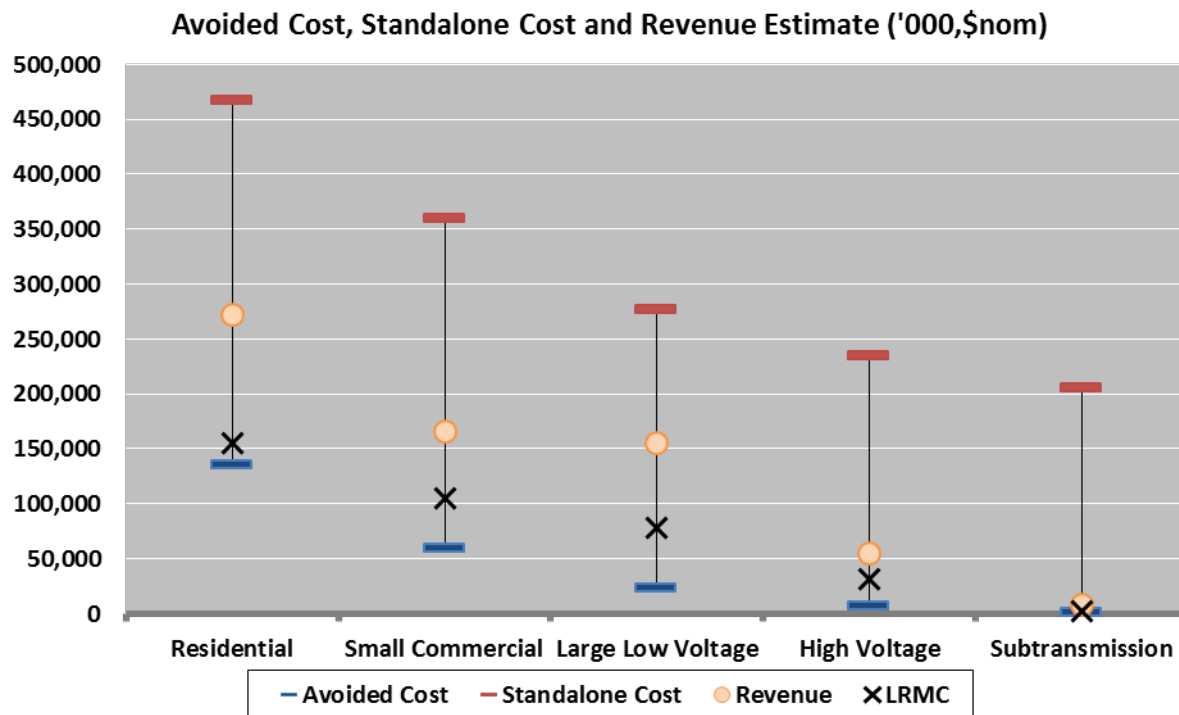
We have estimated our LRMC for each tariff class by annualising the cost of augmenting capacity (measured by the marginal cost of reinforcement) and scale growth in operating and maintenance costs associated with network augmentation, per unit of additional capacity provided.

### 3.1.6 Revenue lies between stand-alone and avoidable costs

A comparison of the 2019 stand-alone costs, avoidable costs, LRMC and distribution revenue for our tariff classes is shown in the following figure, and demonstrates that our recorded revenue for each tariff class lies within the boundaries described above. Of note:

- The 2019 distribution revenue for each network tariff class fall within the bounds of the stand-alone and avoidable costs and hence are subsidy-free; and
- Demonstrating our cost efficiency, the LRMC of each tariff class yields a cost that does not vary greatly from that expected to be recovered through the 2019 distribution revenue

Figure 3.1 Costs and revenue comparison



## 3.2 Designated pricing proposal charges

### 3.2.1 Maximum revenue control

Designated pricing proposal charges (**DPPEC**) recover the payments we make for transmission charges, avoided transmission payments and inter-distributor payments as well as under and over recovery of TUoS revenue.<sup>6</sup>

The table below summarises the calculation of the 2019 maximum revenue for DPPEC.

Table 3.4 DPPEC maximum revenue for 2019

Revenue item	2019 value (\$,000)
Transmission, avoided transmission and inter-distributor charges	155,818
Unders and overs amount	-8,736
<b>Total DPPEC revenue</b>	<b>147,081</b>

<sup>6</sup> Transmission charges, avoided transmission payments and inter-distributor payments are defined as follows:

- Transmission charges are payments for using the HV network.
- Avoided transmission payments (i.e. TUoS) are payments recognising that energy supplied to the DNSP by an Embedded Generator (e.g. large scale solar and wind farms) would have otherwise been supplied from the HV network.
- Inter-distributor payments recognises cross boundary settlements between networks. This applies when customers located near border are supplied by a neighbouring network.

### 3.3 Jurisdictional scheme charges

#### 3.3.1 Jurisdictional scheme eligibility

The Victorian Premium Feed-in tariff (**PFIT**) and Transitional Feed-in tariff (**TFIT**) schemes are jurisdictional schemes as well as under and over recovery of JUoS revenue .

The key principles of our jurisdictional scheme tariff methodology are:

- the total jurisdictional scheme revenue allocated to network tariffs aligns with the total estimated charge to be paid by us, adjusted for any overs and unders from previous regulatory years and also adjusted for the time value of money;
- charges are allocated to tariffs in a manner that reflects the customers that the scheme serves.

#### 3.3.2 Maximum revenue control

The table below summarises the calculation of the 2019 maximum revenue for jurisdictional schemes.

Table 3.5 Jurisdictional schemes maximum revenue for 2019

Revenue item	2019 value (\$,000)
Premium feed-in-charges charges	23,000
Unders and overs amount	4,631
<b>Total jurisdictional schemes revenue</b>	<b>27,631</b>

#### 3.3.3 Charging parameters

Our jurisdictional scheme recovery tariffs are included in the bundled Network Use of System (**NUoS**) tariffs. The charging parameters associated with jurisdictional scheme cost recovery tariffs are shown in Section A of this pricing proposal.

Jurisdictional scheme cost recovery charges are billed at the same frequency as the relevant tariff for standard control services.

### 3.4 Indicative prices for 2020

The indicative pricing levels for 2020 are shown in Section A of this pricing proposal. The actual level of our charges will depend on the total allowable revenue of that regulatory year.

### 3.5 Comparison of 2019 Proposed and Indicative Network Tariffs

It is necessary to demonstrate that our Indicative pricing schedules approved in the previous year align with our currently proposed network tariffs. Where the variance exceeds a materiality threshold an explanation is necessary to support the change. We have nominated a materiality threshold of 10 per cent for this purpose.

**Table 3.6 Comparison of 2019 Proposed & Indicative Tariffs**

Tariff class	Tariff	Variance explanation
Low Voltage Small Residential	Residential Docklands flexible Residential Docklands two rate 5d	In 2019 we have proposed to more closely align the prices for Docklands and non-Docklands based customers. This transition will occur incrementally and facilitate tariff structure simplification in the future.
	Residential two rate 5d Residential interval	In 2019 we have proposed to increase off-peak rates for ToU tariffs. This transition will occur incrementally and facilitate phasing out two-rate ToU tariffs in the future.



# 4 Alternative control services

Alternative control services can be broadly divided into:

- ancillary alternative control services which includes both fee-based and quoted charges;
- metering services; and
- public lighting services.

## 4.1 Tariff classes

Metering tariff classes are:

- single phase meter;
- three phase direct connected meter; and
- three phase CT connected meter.

We have constituted a single separate tariff class named 'public lighting alternative control services'.

We have constituted a single separate tariff class named 'ancillary alternative control services'. This single tariff class has been defined to encompass all fee-based and quoted services.

## 4.2 Compliance with the AER determination

The control mechanism equation applicable to our alternative control services tariff class for the current regulatory control period is set out in Attachment 16 of the AER's final decision. Appendix B of this pricing proposal sets out the alternative control services charges.

The structure of the tariffs disclosed in Appendix B has been set for the 2016-2020 regulatory control period and we do not expect this structure to change. However, each year as part of the Annual Pricing Submission, tariffs are adjusted by an X factor and CPI which was approved by the AER in its final decision. Adjustments outside of those determined in the final decision are not expected during the regulatory period.

### 4.2.1 Ancillary services form of control

The derivations of control formulas for ancillary services set out in Attachment 16 of the AER's final decision are produced below:

Table 4.1 AER final decision on X factors for each year of the 2016-2020 regulatory control period (percent)

Year	2017	2018	2019	2020
X factor	-0.37	-0.79	-0.96	-1.02

Source: AER

### 4.2.2 Metering form of control

The derivations of control formulas for metering set out in Attachment 16 of the AER's final decision is produced below.

Table 4.2 Metering revenue criteria summary

Criterion	2019 value (\$,000)
Annual revenue requirement for year preceding t ( $AR_{t-1}$ )	66,625
Annual percentage change in the Australian Bureau of Statistics' Consumer Price Index ( $\Delta CPI_t$ )	2.08%
X factor for each year of the 2016-2020 regulatory control period as determined in the PTRM ( $X_t$ )	8.49%
Adjusted Annual Smoothed Metering Revenue for year t ( $AR_t$ )	62,236
Sum of annual adjustment factors in year t as calculated in the unders and overs account ( $B_t$ )	-1,067
Total annual revenue for annual metering charges ( $TARM_t$ )	<b>61,168</b>

Metering prices are shown in Appendix B.

### 4.3 Metering tariff class side constraints

The derivations of side constraint formula the AER has determined for us to apply to our metering services set out in Attachment 16 of the AER's final decision is reproduced below.

Table 4.3 Metering side constraint summary

Criterion	2019 value
Annual percentage change in the Australian Bureau of Statistics' Consumer Price Index ( $\Delta CPI_t$ )	2.08%
X factor for each year of the 2016-2020 regulatory control period as determined in the PTRM ( $X_t$ )	0.00%
Annual percentage change for the unders and overs recoveries relating to AMI actual revenues and actual costs incurred in 2014 and 2015 ( $T_t$ )	16.86%
Annual percentage change from the sum of annual adjustment factors in year t as calculated in the unders and overs account ( $B'_t$ )	-0.23%
Maximum allowable tolerance	2.00%
<b>Side constraint</b>	<b>20.74%</b>

### 4.4 Public lighting operation, maintenance and replacement

Our public lighting operation, maintenance and replacement 2019 prices are shown in Appendix B.

# A Standard control service charges

## A.1 Standard control services tariff schedules

Table A.1 Network (NUoS) Tariff 2019

Network Tariff 2019	Code	Available to new customers	Fixed \$ pa	Demand Charges			Usage			Summer Time of Use Tariffs			Non-Summer Time of Use Tariffs		
				Jan-Dec	Dec-Mar	Apr-Nov	Anytime	Peak	Off-peak	Pk	Sh	Opk	Pk	Sh	Opk
				\$/kVA pa	\$/kW/month	\$/kW/month	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh
Residential Single Rate	D1	Yes	130	-	-	-	7.22	-	-	-	-	-	-	-	-
Climate Saver	D1CS	No	-	-	-	-	-	10.08	2.32	-	-	-	-	-	-
Climate Saver Interval	D3CS	No	-	-	-	-	-	10.08	2.32	-	-	-	-	-	-
Residential - Flexible Pricing	P13R	Yes	130	-	-	-	-	-	-	12.97	7.50	3.13	12.97	7.50	3.13
Residential Docklands - Flexible Pricing	P13RDK	Yes	130	-	-	-	-	-	-	9.11	5.23	2.14	9.11	5.23	2.14
Climate Saver - Flexible Pricing	P13RCS	No	-	-	-	-	-	-	-	10.08	-	-	2.32	-	-
Docklands single rate	P1DK	Yes	130	-	-	-	6.82	-	-	-	-	-	-	-	-
Residential Two Rate 5d	D2	No	130	-	-	-	-	12.40	3.11	-	-	-	-	-	-
Docklands Two Rate 5d	D2DK	No	130	-	-	-	-	11.89	2.91	-	-	-	-	-	-
Residential Interval	D3	No	130	-	-	-	-	12.40	3.11	-	-	-	-	-	-
Residential Two Rate 5d - controlled load <sup>(1)</sup>	D2OP	Yes	-	-	-	-	-	-	2.32	-	-	-	-	-	-
Docklands Two Rate 5d - controlled load <sup>(1)</sup>	D2DKOP	Yes	-	-	-	-	-	-	2.32	-	-	-	-	-	-
Dedicated circuit <sup>(1)</sup>	DD1	Yes	-	-	-	-	-	-	2.32	-	-	-	-	-	-
Hot Water Interval <sup>(1)</sup>	D3HW	Yes	-	-	-	-	-	-	2.32	-	-	-	-	-	-
Residential Demand	DD	Yes	130	-	10.03	3.35	3.38	-	-	-	-	-	-	-	-
Newstead Residential Trial <sup>(2)</sup>	DDNEW	Yes	375	-	2.01	2.01	-	-	-	-	-	-	-	-	-
Non-Residential Single Rate	ND1	Yes	170	-	-	-	7.90	-	-	-	-	-	-	-	-
Non-Residential Flexible Pricing	P14G	Yes	170	-	-	-	-	-	-	12.60	4.18	3.27	12.60	4.18	3.27
Non-Residential Two Rate 5d	ND2	No	170	-	-	-	-	12.75	3.15	-	-	-	-	-	-
Non-Residential Interval	ND5	No	170	-	-	-	-	12.75	3.15	-	-	-	-	-	-
Non-Residential Two Rate 7d	ND3	No	170	-	-	-	-	11.29	3.15	-	-	-	-	-	-
Non-Residential Demand	NDD	Yes	170	-	13.36	4.45	3.93	-	-	-	-	-	-	-	-
Medium Business Demand	NDM	Yes	1,100	-	7.51	3.75	-	6.80	4.45	-	-	-	-	-	-
Public Lighting	PL2	Yes	-	-	-	-	-	14.61	4.40	-	-	-	-	-	-
Medium Business Opt-out <sup>(3)</sup>	NDMO	Yes	1,100	-	-	-	-	13.57	4.61	-	-	-	-	-	-
Large low Voltage	LLV	Yes	8,200	107.83	-	-	-	4.19	2.22	-	-	-	-	-	-
High Voltage	HV	Yes	46,700	92.26	-	-	-	2.57	0.98	-	-	-	-	-	-
High Voltage Docklands	HVD	Yes	40,400	81.02	-	-	-	2.21	0.86	-	-	-	-	-	-
Subtransmission	ST	Yes	252,500	24.16	-	-	-	2.58	0.78	-	-	-	-	-	-

Note: (1) customers must already be on the equivalent primary tariff  
 (2) Newstead Residential Trial is restricted to residential customers located in postcode 3462  
 (3) available to non-residential customers consuming less than 160 MWh per annum

Table A.2 Distribution (DUoS) Tariff 2019

Distribution Tariff 2019	Code	Fixed	Demand Charges			Usage			Summer Time of Use Tariffs			Non-Summer Time of Use Tariffs		
			Jan-Dec	Dec-Mar	Apr-Nov	Anytime	Peak	Off-peak	Pk	Sh	Opk	Pk	Sh	Opk
		\$ pa	\$/kVA pa	\$/kW/month	\$/kW/month	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh
Residential Single Rate	D1	130	-	-	-	5.28	-	-	-	-	-	-	-	-
Climate Saver	D1CS	-	-	-	-	-	7.48	1.51	-	-	-	-	-	-
Climate Saver Interval	D3CS	-	-	-	-	-	7.48	1.51	-	-	-	-	-	-
Residential - Flexible Pricing	P13R	130	-	-	-	-	-	-	9.70	5.49	2.14	9.70	5.49	2.14
Residential Docklands - Flexible Pricing	P13RDK	130	-	-	-	-	-	-	6.73	3.75	1.38	6.73	3.75	1.38
Climate Saver - Flexible Pricing	P13RCS	-	-	-	-	-	-	-	7.48	-	-	1.51	-	-
Docklands single rate	P1DK	130	-	-	-	4.97	-	-	-	-	-	-	-	-
Residential Two Rate 5d	D2	130	-	-	-	-	9.26	2.12	-	-	-	-	-	-
Docklands Two Rate 5d	D2DK	130	-	-	-	-	8.87	1.97	-	-	-	-	-	-
Residential Interval	D3	130	-	-	-	-	9.26	2.12	-	-	-	-	-	-
Residential Two Rate 5d - controlled load <sup>(1)</sup>	D2OP	-	-	-	-	-	-	1.51	-	-	-	-	-	-
Docklands Two Rate 5d - controlled load <sup>(1)</sup>	D2DKOP	-	-	-	-	-	-	1.51	-	-	-	-	-	-
Dedicated circuit <sup>(1)</sup>	DD1	-	-	-	-	-	-	1.51	-	-	-	-	-	-
Hot Water Interval <sup>(1)</sup>	D3HW	-	-	-	-	-	-	1.51	-	-	-	-	-	-
Residential Demand	DD	130	-	7.71	2.57	2.33	-	-	-	-	-	-	-	-
Newstead Residential Trial <sup>(2)</sup>	DDNEW	375	-	1.54	1.54	-	-	-	-	-	-	-	-	-
Non-Residential Single Rate	ND1	170	-	-	-	6.69	-	-	-	-	-	-	-	-
Non-Residential Flexible Pricing	P14G	170	-	-	-	-	-	-	10.86	3.40	2.59	10.86	3.40	2.59
Non-Residential Two Rate 5d	ND2	170	-	-	-	-	11.00	2.48	-	-	-	-	-	-
Non-Residential Interval	ND5	170	-	-	-	-	11.00	2.48	-	-	-	-	-	-
Non-Residential Two Rate 7d	ND3	170	-	-	-	-	9.70	2.48	-	-	-	-	-	-
Non-Residential Demand	NDD	170	-	11.85	3.95	3.17	-	-	-	-	-	-	-	-
Medium Business Demand	NDM	1,100	-	6.66	3.33	-	5.73	3.64	-	-	-	-	-	-
Public Lighting	PL2	-	-	-	-	-	14.61	4.40	-	-	-	-	-	-
Medium Business Opt-out <sup>(3)</sup>	NDMO	1,100	-	-	-	-	11.73	3.79	-	-	-	-	-	-
Large low Voltage	LLV	8,200	87.65	-	-	-	3.14	1.54	-	-	-	-	-	-
High Voltage	HV	46,700	58.12	-	-	-	1.62	0.62	-	-	-	-	-	-
High Voltage Docklands	HVD	40,400	51.04	-	-	-	1.39	0.54	-	-	-	-	-	-
Subtransmission	ST	252,500	4.76	-	-	-	0.51	0.15	-	-	-	-	-	-



Table A. 3 Transmission (TUoS) Tariff 2019

Transmission Tariff 2019	Code	Fixed	Demand Charges			Usage			Summer Time of Use Tariffs			Non-Summer Time of Use Tariffs		
			Jan-Dec	Dec-Mar	Apr-Nov	Anytime	Peak	Off-peak	Pk	Sh	Opk	Pk	Sh	Opk
		\$ pa	\$/kVA pa	\$/kW/month	\$/kW/month	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh
Residential Single Rate	D1	-	-	-	-	1.59	-	-	-	-	-	-	-	-
Climate Saver	D1CS	-	-	-	-	-	2.25	0.46	-	-	-	-	-	-
Climate Saver Interval	D3CS	-	-	-	-	-	2.25	0.46	-	-	-	-	-	-
Residential - Flexible Pricing	P13R	-	-	-	-	-	-	-	2.92	1.66	0.64	2.92	1.66	0.64
Residential Docklands - Flexible Pricing	P13RDK	-	-	-	-	-	-	-	2.03	1.13	0.41	2.03	1.13	0.41
Climate Saver - Flexible Pricing	P13RCS	-	-	-	-	-	-	-	2.25	-	-	0.46	-	-
Docklands single rate	P1DK	-	-	-	-	1.50	-	-	-	-	-	-	-	-
Residential Two Rate 5d	D2	-	-	-	-	-	2.79	0.64	-	-	-	-	-	-
Docklands Two Rate 5d	D2DK	-	-	-	-	-	2.67	0.59	-	-	-	-	-	-
Residential Interval	D3	-	-	-	-	-	2.79	0.64	-	-	-	-	-	-
Residential Two Rate 5d - controlled load <sup>(1)</sup>	D2OP	-	-	-	-	-	-	0.46	-	-	-	-	-	-
Docklands Two Rate 5d - controlled load <sup>(1)</sup>	D2DKOP	-	-	-	-	-	-	0.46	-	-	-	-	-	-
Dedicated circuit <sup>(1)</sup>	DD1	-	-	-	-	-	-	0.46	-	-	-	-	-	-
Hot Water Interval <sup>(1)</sup>	D3HW	-	-	-	-	-	-	0.46	-	-	-	-	-	-
Residential Demand	DD	-	-	2.32	0.78	0.70	-	-	-	-	-	-	-	-
Newstead Residential Trial <sup>(2)</sup>	DDNEW	-	-	0.47	0.47	-	-	-	-	-	-	-	-	-
Non-Residential Single Rate	ND1	-	-	-	-	0.86	-	-	-	-	-	-	-	-
Non-Residential Flexible Pricing	P14G	-	-	-	-	-	-	-	1.39	0.43	0.33	1.39	0.43	0.33
Non-Residential Two Rate 5d	ND2	-	-	-	-	-	1.40	0.32	-	-	-	-	-	-
Non-Residential Interval	ND5	-	-	-	-	-	1.40	0.32	-	-	-	-	-	-
Non-Residential Two Rate 7d	ND3	-	-	-	-	-	1.24	0.32	-	-	-	-	-	-
Non-Residential Demand	NDD	-	-	1.51	0.50	0.41	-	-	-	-	-	-	-	-
Medium Business Demand	NDM	-	-	0.85	0.42	-	0.73	0.47	-	-	-	-	-	-
Public Lighting	PL2	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Business Opt-out <sup>(3)</sup>	NDMO	-	-	-	-	-	1.50	0.48	-	-	-	-	-	-
Large low Voltage	LLV	-	20.18	-	-	-	0.72	0.35	-	-	-	-	-	-
High Voltage	HV	-	34.14	-	-	-	0.95	0.36	-	-	-	-	-	-
High Voltage Docklands	HVD	-	29.98	-	-	-	0.82	0.32	-	-	-	-	-	-
Subtransmission	ST	-	19.40	-	-	-	2.07	0.63	-	-	-	-	-	-

Table A.4 Jurisdictional Scheme (JUoS) Tariff 2019

Jurisdictional Tariff 2019	Code	Fixed	Demand Charges			Usage			Summer Time of Use Tariffs			Non-Summer Time of Use Tariffs		
			Jan-Dec	Dec-Mar	Apr-Nov	Anytime	Peak	Off-peak	Pk	Sh	Opk	Pk	Sh	Opk
		\$ pa	\$/kVA pa	\$/kW/month	\$/kW/month	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh
Residential Single Rate	D1	-	-	-	-	0.35	-	-	-	-	-	-	-	-
Climate Saver	D1CS	-	-	-	-	-	0.35	0.35	-	-	-	-	-	-
Climate Saver Interval	D3CS	-	-	-	-	-	0.35	0.35	-	-	-	-	-	-
Residential - Flexible Pricing	P13R	-	-	-	-	-	-	-	0.35	0.35	0.35	0.35	0.35	0.35
Residential Docklands - Flexible Pricing	P13RDK	-	-	-	-	-	-	-	0.35	0.35	0.35	0.35	0.35	0.35
Climate Saver - Flexible Pricing	P13RCS	-	-	-	-	-	-	-	0.35	-	-	0.35	-	-
Docklands single rate	P1DK	-	-	-	-	0.35	-	-	-	-	-	-	-	-
Residential Two Rate 5d	D2	-	-	-	-	-	0.35	0.35	-	-	-	-	-	-
Docklands Two Rate 5d	D2DK	-	-	-	-	-	0.35	0.35	-	-	-	-	-	-
Residential Interval	D3	-	-	-	-	-	0.35	0.35	-	-	-	-	-	-
Residential Two Rate 5d - controlled load <sup>(1)</sup>	D2OP	-	-	-	-	-	-	0.35	-	-	-	-	-	-
Docklands Two Rate 5d - controlled load <sup>(1)</sup>	D2DKOP	-	-	-	-	-	-	0.35	-	-	-	-	-	-
Dedicated circuit <sup>(1)</sup>	DD1	-	-	-	-	-	-	0.35	-	-	-	-	-	-
Hot Water Interval <sup>(1)</sup>	D3HW	-	-	-	-	-	-	0.35	-	-	-	-	-	-
Residential Demand	DD	-	-	-	-	0.35	-	-	-	-	-	-	-	-
Newstead Residential Trial <sup>(2)</sup>	DDNEW	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Residential Single Rate	ND1	-	-	-	-	0.35	-	-	-	-	-	-	-	-
Non-Residential Flexible Pricing	P14G	-	-	-	-	-	-	-	0.35	0.35	0.35	0.35	0.35	0.35
Non-Residential Two Rate 5d	ND2	-	-	-	-	-	0.35	0.35	-	-	-	-	-	-
Non-Residential Interval	ND5	-	-	-	-	-	0.35	0.35	-	-	-	-	-	-
Non-Residential Two Rate 7d	ND3	-	-	-	-	-	0.35	0.35	-	-	-	-	-	-
Non-Residential Demand	NDD	-	-	-	-	0.35	-	-	-	-	-	-	-	-
Medium Business Demand	NDM	-	-	-	-	-	0.34	0.34	-	-	-	-	-	-
Public Lighting	PL2	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Business Opt-out <sup>(3)</sup>	NDMO	-	-	-	-	-	0.34	0.34	-	-	-	-	-	-
Large low Voltage	LLV	-	-	-	-	-	0.33	0.33	-	-	-	-	-	-
High Voltage	HV	-	-	-	-	-	-	-	-	-	-	-	-	-
High Voltage Docklands	HVD	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtransmission	ST	-	-	-	-	-	-	-	-	-	-	-	-	-

## A.2 Indicative pricing schedule for 2020 network tariffs (NUoS)

Table A.5 2020 NUoS Tariff

Indicative Network Tariff 2020	Code	Available to new customers	Fixed	Demand Charges			Usage			Summer Time of Use Tariffs			Non-Summer Time of Use Tariffs		
				Jan-Dec	Dec-Mar	Apr-Nov	Anytime	Peak	Off-peak	Pk	Sh	Opk	Pk	Sh	Opk
			\$ pa	\$/kVA pa	\$/kW/month	\$/kW/month	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh
Residential Single Rate	D1	Yes	135	-	-	-	7.51	-	-	-	-	-	-	-	-
Climate Saver	D1CS	No	-	-	-	-	-	10.48	2.41	-	-	-	-	-	-
Climate Saver Interval	D3CS	No	-	-	-	-	-	10.48	2.41	-	-	-	-	-	-
Residential - Flexible Pricing	P13R	Yes	135	-	-	-	-	-	-	13.49	7.80	3.26	13.49	7.80	3.26
Residential Docklands - Flexible Pricing	P13RDK	Yes	135	-	-	-	-	-	-	11.55	6.66	2.76	11.55	6.66	2.76
Climate Saver - Flexible Pricing	P13RCS	No	-	-	-	-	-	-	-	10.48	-	-	2.41	-	-
Docklands single rate	P1DK	Yes	135	-	-	-	7.31	-	-	-	-	-	-	-	-
Residential Two Rate 5d	D2	No	135	-	-	-	-	12.90	3.55	-	-	-	-	-	-
Docklands Two Rate 5d	D2DK	No	135	-	-	-	-	12.64	3.35	-	-	-	-	-	-
Residential Interval	D3	No	135	-	-	-	-	12.90	3.55	-	-	-	-	-	-
Residential Two Rate 5d - controlled load <sup>(1)</sup>	D2OP	Yes	-	-	-	-	-	-	2.41	-	-	-	-	-	-
Docklands Two Rate 5d - controlled load <sup>(1)</sup>	D2DKOP	Yes	-	-	-	-	-	-	2.41	-	-	-	-	-	-
Dedicated circuit <sup>(1)</sup>	DD1	Yes	-	-	-	-	-	-	2.41	-	-	-	-	-	-
Hot Water Interval <sup>(1)</sup>	D3HW	Yes	-	-	-	-	-	-	2.41	-	-	-	-	-	-
Residential Demand	DD	Yes	135	-	10.43	3.48	3.52	-	-	-	-	-	-	-	-
Newstead Residential Trial <sup>(2)</sup>	DDNEW	Yes	390	-	2.09	2.09	-	-	-	-	-	-	-	-	-
Non-Residential Single Rate	ND1	Yes	175	-	-	-	8.22	-	-	-	-	-	-	-	-
Non-Residential Flexible Pricing	P14G	Yes	180	-	-	-	-	-	-	13.10	4.35	3.40	13.10	4.35	3.40
Non-Residential Two Rate 5d	ND2	No	180	-	-	-	-	13.26	3.28	-	-	-	-	-	-
Non-Residential Interval	ND5	No	180	-	-	-	-	13.26	3.28	-	-	-	-	-	-
Non-Residential Two Rate 7d	ND3	No	180	-	-	-	-	11.74	3.28	-	-	-	-	-	-
Non-Residential Demand	NDD	Yes	180	-	13.89	4.63	4.09	-	-	-	-	-	-	-	-
Medium Business Demand	NDM	Yes	1,300	-	13.28	6.64	-	4.09	4.09	-	-	-	-	-	-
Public Lighting	PL2	Yes	-	-	-	-	-	15.19	4.58	-	-	-	-	-	-
Medium Business Opt-out <sup>(3)</sup>	NDMO	Yes	1,300	-	-	-	-	14.11	4.79	-	-	-	-	-	-
Large low Voltage	LLV	Yes	8,550	112.14	-	-	-	4.36	2.31	-	-	-	-	-	-
High Voltage	HV	Yes	48,600	95.95	-	-	-	2.67	1.02	-	-	-	-	-	-
High Voltage Docklands	HVD	Yes	45,300	90.41	-	-	-	2.49	0.96	-	-	-	-	-	-
Subtransmission	ST	Yes	262,600	25.13	-	-	-	2.68	0.81	-	-	-	-	-	-

Note: (1) customers must already be on the equivalent primary tariff  
(2) Newstead Residential Trial is restricted to residential customers located in postcode 3462  
(3) available to non-residential customers consuming less than 160 MWh per annum

## A.3 Charging Parameters

This section is organised by tariff class and provides a description how each tariffs is structured differently according to the following charging parameters –fixed charge, energy, and demand.

### A.3.1 Low voltage residential tariffs

Table A. 6 Low voltage residential tariff charging parameters

Charging parameter		Fixed	Energy										Demand		
		Standing charge	Anytime energy	Peak energy	Off-peak energy	Summer peak energy	Summer shoulder energy	Summer off-peak energy	Non-summer peak energy	Non-summer shoulder energy	Non-summer off-peak energy	Rolling peak demand	Summer demand	Non-summer demand	
		\$ pa	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	\$/kVA pa	\$/kW/month	\$/kW/month	
Single rate	D1	✓	✓												
	P1DK	✓	✓												
Flexible pricing	P13R	✓				✓	✓	✓	✓	✓	✓				
	P13RDK	✓				✓	✓	✓	✓	✓	✓				
Time of use	D2	✓		✓	✓										
	D2DK	✓		✓	✓										
	D3	✓		✓	✓										
Climate Saver	D1CS			✓	✓										
	D3CS			✓	✓										
	P13RCS					✓			✓						
Controlled load	D2OP				✓										
	D2DKOP				✓										
	DD1				✓										
	D3HW				✓										
Cost-reflective	DD	✓	✓									✓		✓	
Newstead Trial	DDNEW	✓										✓		✓	

### A.3.2 Low voltage business tariffs

Table A. 7 Low voltage small business tariff charging parameters including unmetered supplies

Charging parameter		Fixed	Energy										Demand		
		Standing charge	Anytime energy	Peak energy	Off-peak energy	Summer peak energy	Summer shoulder energy	Summer off-peak energy	Non-summer peak energy	Non-summer shoulder energy	Non-summer off-peak energy	Rolling peak demand	Summer demand	Non-summer demand	
		\$ pa	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	\$/kVA pa	\$/kW/month	\$/kW/month	
Single rate	ND1	✓	✓												
Time of use	ND2	✓		✓	✓										
	ND5	✓		✓	✓										
	ND3	✓		✓	✓										
Flexible pricing	P14G	✓				✓	✓	✓	✓	✓	✓				
Small business cost-reflective	NDD	✓	✓										✓	✓	
Medium business cost-reflective	NDM	✓		✓	✓								✓	✓	
Medium business opt-out	NDMO	✓		✓	✓										
Unmetered	PL2			✓	✓										

From 1 January 2018 the retailer of a business customer consuming more than 40 MWh per annum and less than 160 MWh per annum who has given notice to their retailer that they wish to cease being charged a retail demand charge, can request for the customer to be opted out from a network tariff with a demand charge. The customer will be reassigned to the medium business opt-out tariff with zero demand charge.

### A.3.3 Large business tariffs

Table A. 8 Large low voltage kVA demand tariff charging parameters

Charging parameter		Fixed	Energy										Demand		
		Standing charge	Anytime energy	Peak energy	Off-peak energy	Summer peak energy	Summer shoulder energy	Summer off-peak energy	Non-summer peak energy	Non-summer shoulder energy	Non-summer off-peak energy	Rolling peak demand	Summer demand	Non-summer demand	
		\$ pa	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	c/kWh	\$/kVA pa	\$/kW/month	\$/kW/month	
Large low voltage	LLV	✓		✓	✓							✓			
	HV	✓		✓	✓							✓			
High voltage	HVD	✓		✓	✓							✓			
	ST	✓		✓	✓							✓			

## A.4 Tariff charging windows

### A.4.1 Low voltage residential tariffs

Figure A.1 Low voltage residential charging windows

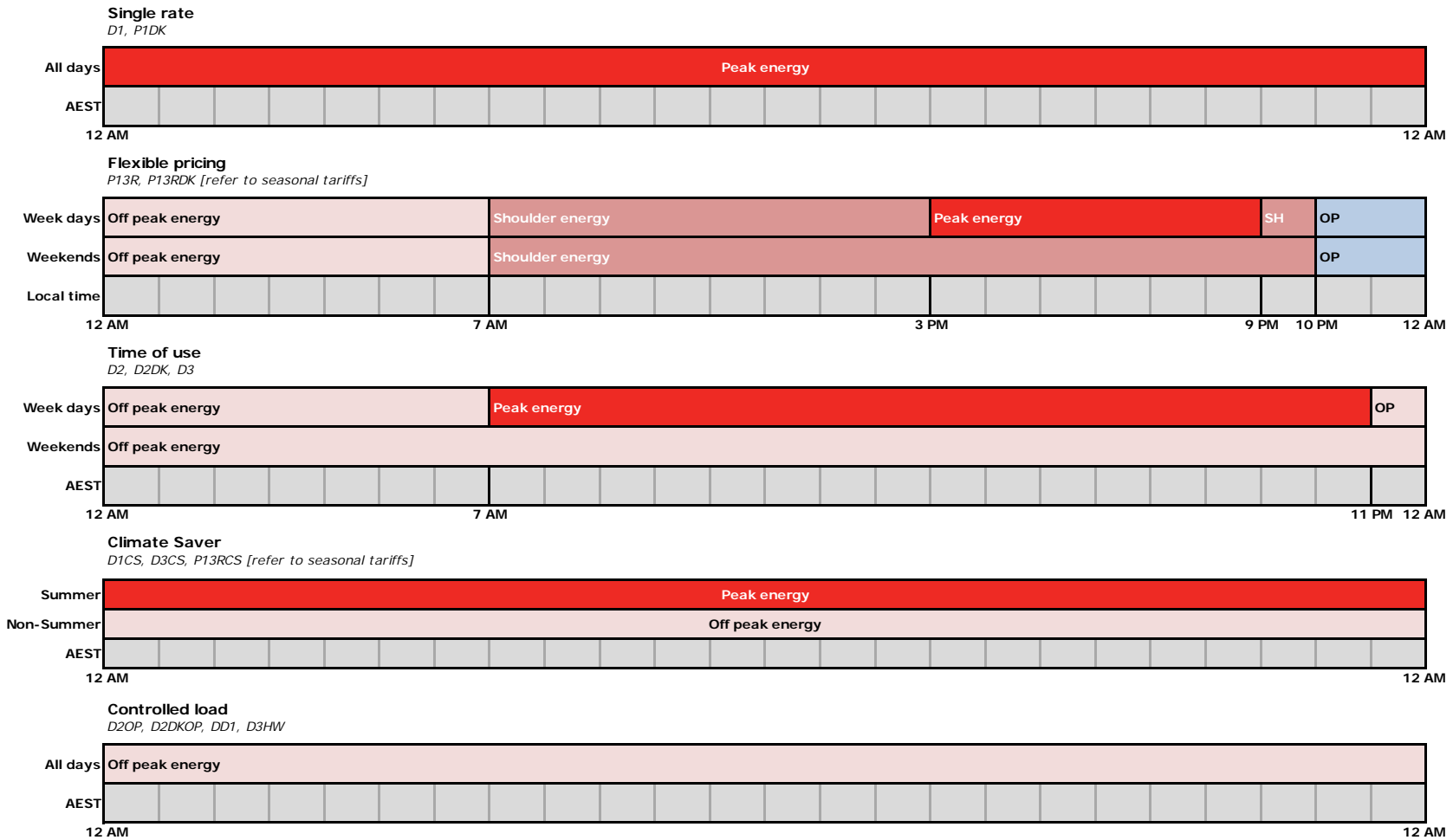
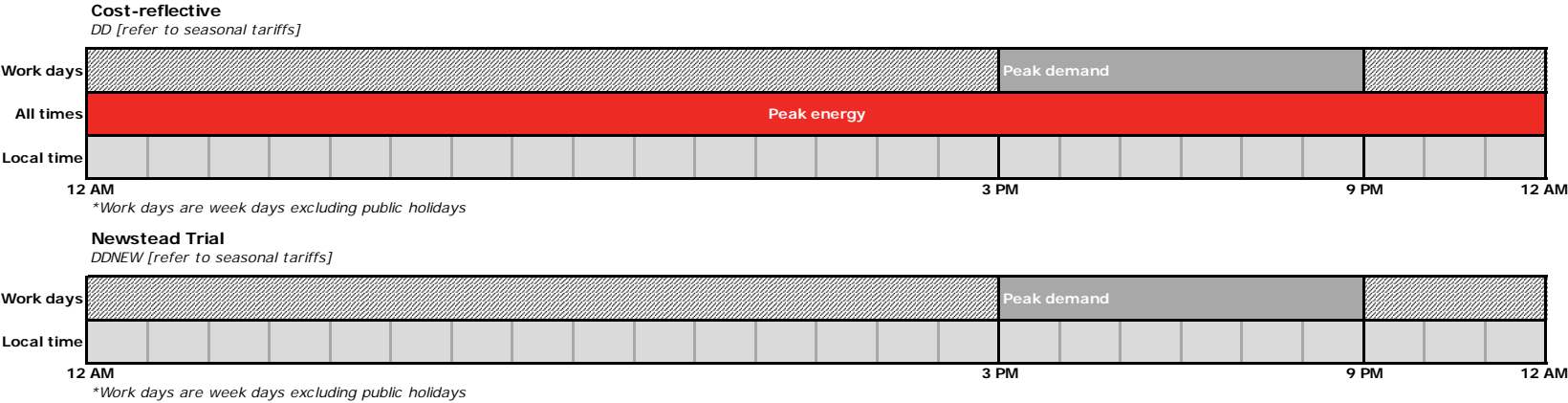


Figure A.1 Low voltage residential charging windows (continued)





A.4.2 Low voltage small business tariffs

Figure A.2 Low voltage small business charging windows

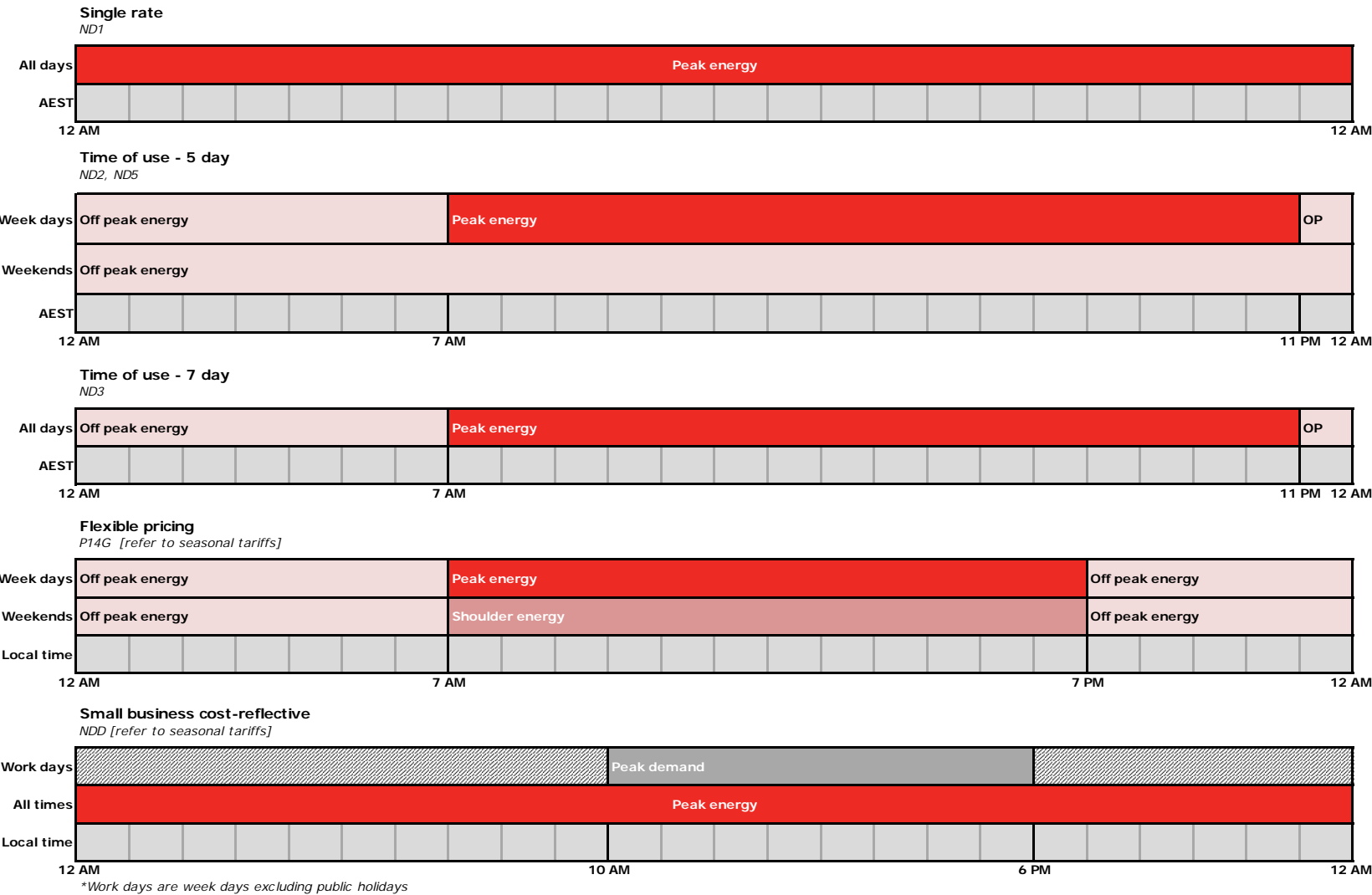
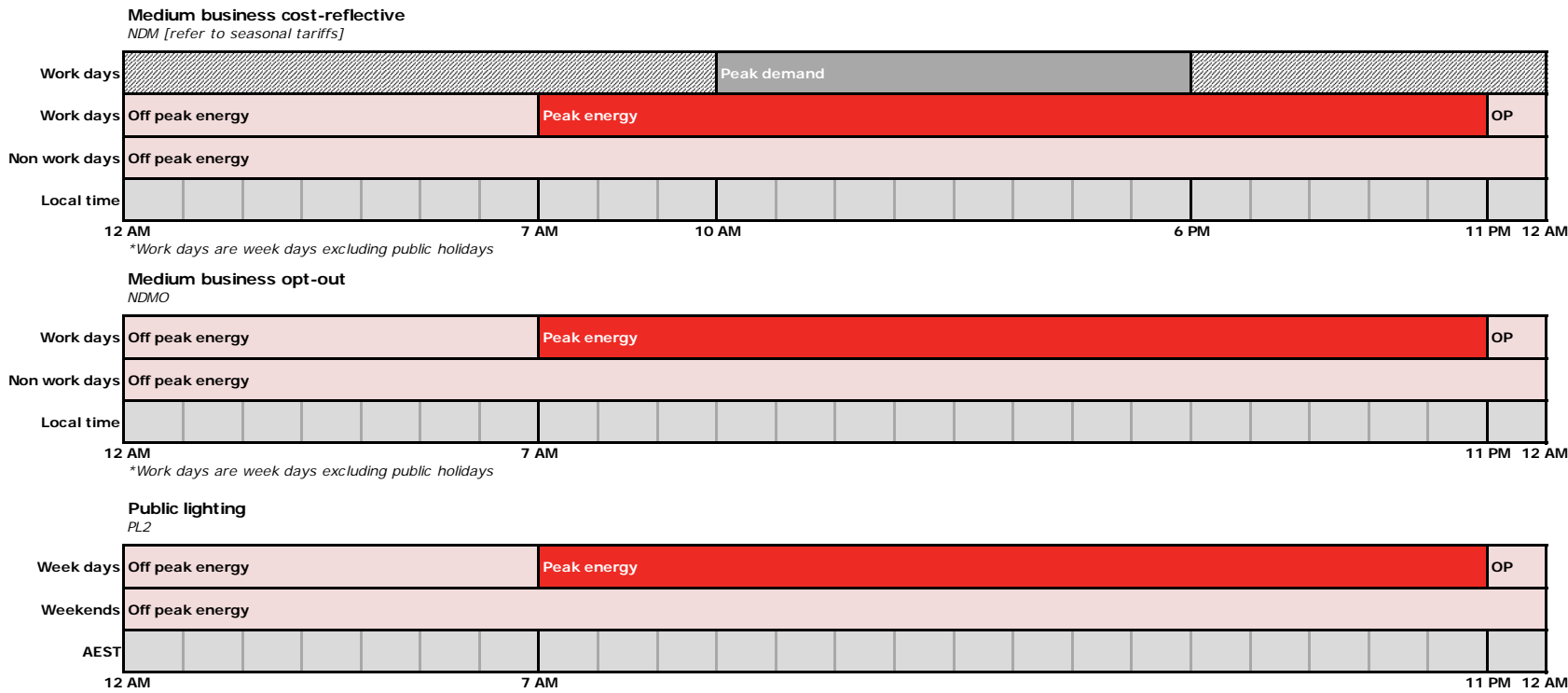
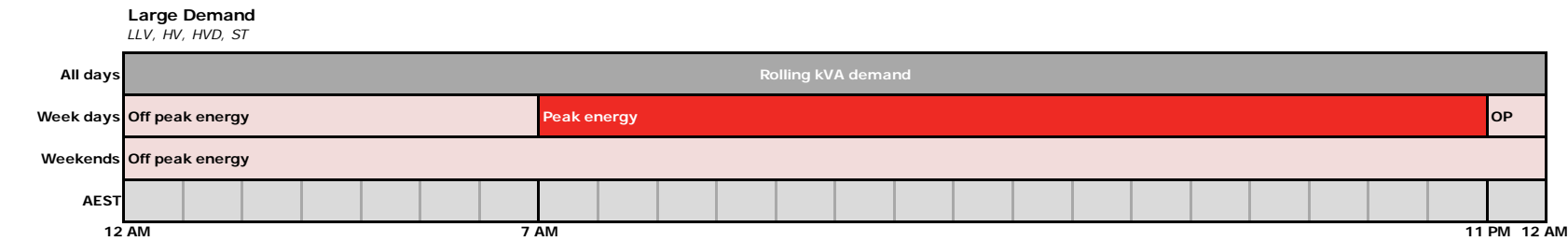


Figure A.2 Low voltage small business charging windows (continued)



A.4.3 Large commercial tariffs

Figure A.3 Large commercial customers charging windows



## A.4.4 Seasonal windows

Figure A.4 Seasonal windows

***Flexible pricing tariffs - Residential and Commercial***

*P13R, P13RDK, P14G*

Season	Non-summer					Summer			Non-summer			
Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun

***Climate Saver tariffs - residential***

*D1CS, D3CS, P13RCS*

Season	Non-summer				Summer					Non-summer		
Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun

***Cost-reflective tariffs - Residential and Commercial***

*DD, DDNEW, NDD, NDM*

Season	Non-summer					Summer				Non-summer		
Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun

## A.5 Tariff eligibility for new & existing customers

Table A.9 Tariffs available to new and existing residential customers in 2019

Tariff code	Tariff description	Supply voltage (V) <sup>(1)</sup>	Energy threshold (MWh/a)	Eligible customers
GENR13	Embedded generation	N/A	N/A	<ul style="list-style-type: none"> <li>Must have an interval meter</li> <li>May be required for Feed-In tariffs (FIT), refer to retailer for details</li> </ul>
D1	Residential single rate	<1,000	< 60	<ul style="list-style-type: none"> <li>This is the default tariff for greenfield new connections not located in the Docklands where the retailer does not specify an alternative open tariff</li> </ul>
P1DK	Residential single rate - Docklands			<ul style="list-style-type: none"> <li>1-phase residential customers connected in the Docklands area</li> <li>This is the default tariff for greenfield new connections in the Docklands area where the retailer does not specify an alternative open tariff</li> </ul>
P13R	Flexible pricing - residential			<ul style="list-style-type: none"> <li>Residential customers not connected in Docklands area.</li> <li>Requires an active market interval read meter</li> </ul>
P13RDK	Flexible pricing – residential - Docklands			<ul style="list-style-type: none"> <li>Residential customers connected in the Docklands area</li> <li>Requires an active market interval read meter</li> </ul>
DD	Residential Demand Tariff			<ul style="list-style-type: none"> <li>Requires an active market interval read meter</li> </ul>
D3HW	Hot Water Interval			<ul style="list-style-type: none"> <li>1-phase residential customers with supply on D3 (closed tariff) with dedicated circuit connected to a controlled load</li> <li>1-phase electric hot water service with a total load of &lt;30 amps.</li> </ul> <p><b>Switching Times:</b> Any 7-day switching configuration (at Powercor's discretion) providing a total of up to 8 hours supply daily between 2100-0700 only.</p>
D2DKOP	Docklands Two Rate 5d – controlled load			<ul style="list-style-type: none"> <li>Where GP&amp;L is connected to D2DK (closed tariff)</li> <li>Applicable to hot water only</li> <li>Where metering permits</li> <li>Existing customers connected in the Docklands area</li> <li>1-phase electric hot water service with a total load of &lt;30Amps.</li> </ul> <p><b>Switching Times:</b> Typically switching times will occur between 11pm and 7am. These times may vary depending on localised demand management activities.</p>

Tariff code	Tariff description	Supply voltage (V) <sup>(1)</sup>	Energy threshold (MWh/a)	Eligible customers
D2OP	Residential Two Rate 5d – controlled load	<1,000	< 60	<ul style="list-style-type: none"> <li>Where GP&amp;L is currently connected to D2 (closed tariff)</li> <li>Applicable to hot water only</li> <li>Where metering permits</li> <li>1-phase electric hot water service with a total load of &lt;30 amps.</li> </ul> <p><b>Switching Times:</b> Typically switching times will occur between 11pm and 7am. These times may vary depending on localised demand management activities.</p>
DD1	Dedicated Circuit			<ul style="list-style-type: none"> <li>Residential customers with dedicated circuit connected to a controlled load</li> <li>1-phase electric hot water service with a total load of &lt;30 amps.</li> <li>Available to customers on a residential single rate tariff and residential demand tariff</li> </ul> <p><b>Switching Times:</b> Typically switching times will occur between 11pm and 7am. These times may vary depending on localised demand management activities.</p> <p><b>Slab heating</b></p> <ul style="list-style-type: none"> <li>Typically switching times will occur between 11pm and 7am. These times may vary depending on localised demand management activities.</li> <li>An afternoon boost between 1pm and 4pm may occur during winter.</li> </ul>
DDNEW	Newstead Residential Trial			<ul style="list-style-type: none"> <li>Requires an active market interval read meter</li> <li>Restricted to residential customers located in postcode 3462</li> </ul>

Table A. 10 Tariffs available to new and existing small commercial customers in 2019

Tariff code	Tariff description	Supply voltage (V) <sup>(1)</sup>	Energy threshold (MWh/a)	Eligible customers
ND1	Non-residential single rate	<1,000	< 60	<ul style="list-style-type: none"> <li>Non-residential customers or builder's temporary supplies</li> <li>No controlled load</li> </ul>
NDD	Non-residential Demand Tariff			<ul style="list-style-type: none"> <li>Non-residential customers or builder's temporary supplies</li> <li>Requires an active market interval read meter</li> </ul>
P14G	Non-residential flexible pricing			<ul style="list-style-type: none"> <li>Requires an active market interval read meter</li> </ul>
NDM	Medium business cost-reflective	<1,000	> 60	<ul style="list-style-type: none"> <li>Non-residential customers or builder's temporary supplies</li> <li>Requires an active market interval read meter</li> </ul>
NDMO	Medium business opt-out	N/A	< 160	<ul style="list-style-type: none"> <li>Non-residential customers or builder's temporary supplies</li> <li>Requires an active market interval read meter</li> <li>Customer has opted out of a retail demand tariff</li> </ul>
PL2	Unmetered Supplies / Public Lighting	<1,000	N/A	<ul style="list-style-type: none"> <li>Customers with an approved unmetered load</li> <li>Public Lighting to a public lighting customer</li> <li>Note: New customer connections are required to install a load-limiting device</li> </ul>

**Table A. 11 Tariffs available to new and existing large commercial customers in 2019**

Tariff code	Tariff description	Supply voltage (V) <sup>(1)</sup>	Energy threshold (MWh/a)	Eligible customers
LLV	Large low voltage (kVA demand tariff)	<1,000	N/A	<ul style="list-style-type: none"> <li>Billed demand is the maximum kVA over a 12 month rolling period</li> <li>Interval meter capable of recording E, Q, B, K data stream</li> </ul>
HV	High voltage (kVA demand tariff)	≥1,000 and <66,000	N/A	<ul style="list-style-type: none"> <li>Billed demand is the maximum kVA over a 12 month rolling period</li> <li>Interval meter capable of recording E, Q, B, K data stream</li> </ul>
HVD	High Voltage Dockland (kVA demand tariff)			<ul style="list-style-type: none"> <li>High voltage customers connected to the Docklands area</li> <li>Billed demand is the maximum kVA over a 12 month rolling period</li> <li>Interval meter capable of recording E, Q, B, K data stream</li> </ul>
ST	Sub-transmission (kVA demand tariff)	≥66,000	N/A	<ul style="list-style-type: none"> <li>Sub-transmission voltage customers</li> <li>Billed demand is the maximum kVA over a 12 month rolling period</li> <li>Interval meter capable of recording E, Q, B, K data stream</li> </ul>

Note: (1) The supply voltage is the first minimum criteria a customer must satisfy to be eligible for each tariff. Where a customer requests to transfer from a capacity based tariff to an energy based tariff and the customer is capable of a greater supply capacity than the energy based tariff allows for, then a supply capacity control device is to be installed by the customer before the tariff reassignment can occur.

(2) Connection capacity is the determining factor in tariff selection not actual capacity



## A.6 Tariffs limited to previously assigned customers

Table A. 12 Tariffs limited to previously assigned residential customers

Tariff code	Tariff description	Supply voltage (V) <sup>(1)</sup>	Energy threshold (MWh/a)	Eligible customers
PFIT	Premium Feed-in tariff	N/A	N/A	<ul style="list-style-type: none"> <li>• Must have a compliant meter</li> <li>• Produces electricity from a qualifying photovoltaic generation unit</li> <li>• Has a nameplate generation capacity &lt;= 5kW</li> <li>• Is not a part of an embedded network</li> <li>• Customers taking up this tariff will have their GP&amp;L load remain on its existing tariff unless otherwise advised by the retailer to move to an existing open tariff. If the customer has a controlled load hot water or slab heating then the customer will be automatically transferred to a ToU tariff</li> <li>• Must meet other legislative eligibility criteria(3)</li> </ul>
GENR	Embedded generation (non PFIT)	N/A	N/A	<ul style="list-style-type: none"> <li>• Must have a compliant meter.</li> <li>• May be required for Feed-In tariffs, refer to your retailer for details</li> </ul>
D2	Residential Two Rate 5d	<1,000	< 60	<ul style="list-style-type: none"> <li>• Existing residential customers who requested a 2-rate tariff</li> <li>• Existing customers are allowed 1 phase electric hot water services with a total load of &lt; 30 amps</li> <li>• Existing customers are allowed slab heating and heat banks.</li> </ul>
D2DK	Docklands Two Rate 5d			<ul style="list-style-type: none"> <li>• Existing 1-phase residential customers connected in the Docklands area.</li> </ul>
D3	Residential Interval			<ul style="list-style-type: none"> <li>• Existing Residential customers not in Docklands area</li> </ul>

Table A. 13 Tariffs limited to previously assigned residential customers (continued)

Tariff code	Tariff description	Supply voltage (V) <sup>(1)</sup>	Energy threshold (MWh/a)	Eligible customers
D1CS	Climate Saver	<1,000	< 60	<ul style="list-style-type: none"> <li>This tariff is “stapled” to the primary tariff D1, the conditions applicable to D1 also apply to this tariff</li> <li>Must be on an existing Climate Saver tariff</li> <li>Existing residential customers only (non-docklands)</li> <li>Requires an active market interval read meter</li> </ul>
D3CS	Climate Saver Interval			<ul style="list-style-type: none"> <li>This tariff is “stapled” to the primary tariff D3, the conditions applicable to D3 also apply to this tariff</li> <li>Must be on an existing Climate Saver tariff</li> <li>Existing residential customers only (non-docklands)</li> <li>Requires an active market interval read meter</li> </ul>
P13RCS	Climate Saver – Flexible Pricing			<ul style="list-style-type: none"> <li>This tariff is “stapled” to the flexible pricing parent tariff P13R, the conditions applicable to P13R also apply to this tariff</li> <li>Must be on an existing Climate Saver tariff</li> <li>Existing residential customers only (non-docklands)</li> <li>Requires an active market interval read meter</li> </ul>
D1CS D3CS P13RCS	Note applicable to all Climate Saver tariffs			<p>Residential customers with dedicated circuit connected to a reverse-cycle air-conditioning load</p> <p><b>Notes:</b> Dedicated circuit must include a primary reverse-cycle air-conditioner (RCAC) load with the following specification:</p> <ul style="list-style-type: none"> <li>must be split system and have a minimum output capacity of 4.0kW on the heating cycle</li> <li>must have a minimum 3 star rating according to the Australian Energy labelling program</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>ducted system or inverter technology system, regardless of star rating or whether they are a split system</li> </ul> <p>provided primary RCAC meets requirements, any additional hard-wired RCAC or hard-wired electric heater may be connected to the dedicated circuit</p>

**Table A. 13 Tariffs limited to previously assigned small commercial customers**

Tariff code	Tariff description	Supply voltage (V) <sup>(1)</sup>	Energy threshold (MWh/a)	Eligible customers
ND2	Non-Residential Two Rate 5d	<1,000	< 60	<ul style="list-style-type: none"> <li>Existing customers only</li> <li>Existing customers are allowed 1 phase electric hot water services with a total load of &lt; 30 amps</li> </ul>
ND3	Non-Residential Two Rate 7d			<ul style="list-style-type: none"> <li>Existing customers only</li> </ul>
ND5	Non-Residential Interval			<ul style="list-style-type: none"> <li>Existing customers only</li> <li>Non-residential customers not connected in Docklands area</li> <li>Builder's temporary supply</li> </ul>

Notes: (1) The supply voltage is the first minimum criteria a customer must satisfy to be eligible for each tariff. Where a customer requests to transfer from a capacity based tariff to an energy based tariff and the customer is capable of a greater supply capacity than the energy based tariff allows for, then a supply capacity control device is to be installed by the customer before the tariff reassignment can occur.

(2) Connection capacity is the determining factor in tariff selection not actual capacity.

(3) Eligibility criteria as specified in the *Electricity Industry Amendment (Premium Solar Feed-in Tariff) Act 2009*

## A.7 Further information on kVA demand

The following section outlines the kVA tariff policy which involves the calculation of 12-month rolling maximum demand, which applies to large low voltage, high voltage and sub-transmission customers.

### A.7.1 Calculation of the kVA demand tariff for a monthly bill

Table A. 14 Calculation of the kVA demand tariff for monthly bill

kVA tariff components	Calculation
Fixed charge	Annual charge (\$) × number of days in month / number of days in the year
Demand charge	(\$ per kVA pa x 12 month rolling maximum kVA) / 12
Peak usage charge	cents per peak kWh x peak kWh in month / 100
Off peak usage charge	cents per off-peak kWh x off-peak kWh in month / 100

### A.7.2 Rolling demand

If there is a full 12 month history of the customer's consumption data, the rolling 12-month maximum kVA demand will take effect immediately looking back 12 months.

Demand for greenfield sites will be measured from energisation date to the end date of the bill, until 12 months of history is available when it will revert to a 12-month rolling demand.

### A.7.3 Demand exclusions

The exclusion of temporary increases in demand from the 12-month rolling maximum demand charged to the customer at a supply point will be considered at our discretion. For example if there is a specific, short term need, such as commissioning a new plant. The customer must apply in advance for a temporary increase in demand to be excluded from the supply point's 12-month rolling maximum demand charge.

Large customers that have moved into a premise will automatically continue to have their maximum demand charge based on the 12-month rolling maximum demand. If a customer wishes to exclude the previous customer's demand, they will need to apply to us.

### A.7.4 Power factor correction

Customers installing power factor correction equipment will need to be cognisant of their obligations under the Victorian Electricity Distribution Code to keep harmonic distortion and power factor within prescribed levels. Power factor correction equipment has the potential to exacerbate harmonic distortion and can cause a leading power factor during times of low demand if the equipment is not designed properly.

If a customer installs power factor correction equipment, they may apply for their 12-month rolling maximum demand to be calculated from the date of commissioning of the equipment. This will only be granted where there is an observable improvement in power factor. Seasonal demand profiles will also be taken into account.

# B Alternative control service charges

Alternative control services are a set of activities provided by us that fall under a particular form of regulation due to their monopoly or semi-monopoly nature.

Alternative control services are:

- ancillary network services;
- public lighting operating and maintenance services; and
- metering coordinator services.

We endeavour to perform all alternative control services within normal business hours, however if a circumstance arises where after hours activities are required, this work can only be undertaken where resources are available. The charge applicable will be based on the resource utilised. After hours work includes weekends and public holidays.

All prices are exclusive of GST.

**Table B. 1 Overview of hours**

Hours of Operation	Details
Business hours	8am-5pm Monday to Friday (excluding public holidays) <sup>(1)</sup>
After hours	All other times and only where resources are available <sup>(1)</sup>

Note: (1) Times for de-energisation of existing connections and re-energisation differ from these times

The following sections list and describe the various charges classified as fee based and quoted alternative control services which apply throughout the area served by us.

## Ancillary Network services

Ancillary network services are non-routine types of services which are provided to individual customers on an 'as needs' basis. Ancillary network services are divided into two subclasses:

- fee based; and
- quoted services.

### B.1 Fee based Ancillary Network services

#### B.1.1 Ancillary Network Service charges

The scope of these services are relatively fixed in nature and are levied on a per activity basis.

The charges for each ancillary network service apply where uninhibited site access is granted. If access to the site is restricted then a service truck may be required therefore attracting a service truck fee.

#### B.1.2 New Connection - where we are the metering coordinator

A combined connection and metering service is provided by us as both the electricity distributor and the Metering Coordinator. We are therefore responsible for the metering.

This charge applies when a customer with a supply point with fuses less than 100 amps requiring single or multi-phase Direct Connected Metering moves into a new premises and requests supply. Different charges apply depending on whether the meter is single or multi-phase and whether the service is provided during or after business hours.

This charge also applies when a customer with a supply point with fuses greater than 100 amps and requiring multi-phase CT Metering moves into a new premises and requests supply. Different charges apply depending on whether the service is provided during or after business hours. Note: This fixed charge is separate and additional to quoted charges for augmentation works and Service and Installations Rules (**SIR**) Compliance Inspection as per *Routine connections – customers above 100 amps*.

Charges apply where a request is made for a new supply connection at a specified address (including unmetered supply sites), except where the supply is for security lighting (also known as watchman lighting). This charge also applies where a builder wishes to provide permanent or temporary supply to new properties under construction.

On occasions when a 'builders temporary supply' is installed and subsequently replaced with a permanent supply each new-connection is considered a distinct site visit and separate new-connection charges are applied, the first to the builder for establishing a new-connection for which the builder uses supply for construction purposes and a second new-connection charge to the customer for connecting the supply. This charge includes the removal/ disconnection of the overhead service / underground cable and meter supplying the temporary supply pole where applicable.

An additional attendance charge in the form of a wasted truck visit charge is applied in those situations where we have been to the site and returned to complete works that have been delayed due to the fault of the responsible party or their representative. Where an application for supply is made and the site is found to be defective, the wasted truck visit charge will be applied.

### **B.1.3 New Connection - where we are not the metering coordinator**

A connection service is provided by us as the electricity distributor, where we are not the Metering Coordinator. We are therefore not responsible for the metering. Therefore the charges do not include the costs for installing a meter.

This charge applies when a customer with a supply point with fuses less than 100 amps requiring single or multi-phase Direct Connected Metering moves into a new premises and requests supply. Different charges apply depending on whether the service is provided during or after business hours.

This charge also applies when a customer with a supply point with fuses greater than 100 amps and requiring multi-phase CT Metering moves into a new premises and requests supply. Different charges apply depending on whether the service is provided during or after business hours. Note: This fixed charge is separate and additional to quoted charges for augmentation works and SIR Compliance Inspection as per *Routine connections – customers above 100 amps*.

Charges apply where a request is made for a new supply connection at a specified address (including unmetered supply sites), except where the supply is for security lighting (also known as watchman lighting). This charge also applies where a builder wishes to provide permanent or temporary supply to new properties under construction.

On occasions when a 'builders temporary supply' is installed and subsequently replaced with a permanent supply each new-connection is considered a distinct site visit and separate new-connection charges are applied, the first to the builder for establishing a new-connection for which the builder uses supply for construction purposes and a second new-connection charge to the customer for connecting the supply. This charge includes the removal/ disconnection of the overhead service / underground cable and meter supplying the temporary supply pole where applicable.

An additional attendance charge in the form of a wasted truck visit charge is applied in those situations where we have been to the site and returned to complete works that have been delayed due to the fault of the responsible party or their representative. Where an application for supply is made and the site is found to be defective, the wasted truck visit charge will be applied.

#### **B.1.4 Contestable Meter / NMI Investigation**

A competitive meter investigation charge applies when a request is received by us as the electricity distributor to investigate the competitive metering at a given supply point. A need to investigate can arise in a number of situations, such as:

- wiring transposition investigation;
- contestable metering investigation; and
- meter tampering or bypass.

#### **B.1.5 Manual De-energisation of existing connections**

A disconnection (includes disconnections for non-payment (**DNP**)) charge applies when a request for fuses less than 100 amps are de-energised by a field visit. The service requires that all supply assets remain at the customer's installation.

If at the time of disconnection it is discovered that the installation has been damaged or is defective and will be unsafe to energise, other charges may be applicable once the defect is repaired. These charges will be based on the nature of the works required.

In a normal instance a de-energisation is performed by a special reader. However, there are scenarios where a service truck visit may be required and accordingly a service truck visit charge will be applied.

Some examples where a truck or other resource may be required include:

- special reader resource is not available after hours and an alternative time is not acceptable to the customer;
- no access to distribution equipment - metering and main fuse, including a veranda restricting access to the main fuse;
- no isolation point, necessitating disconnection at the pole;
- multiple NMIs fused at a common isolation point;
- current transformer (**CT**) metered site;
- isolation point in restricted area – substation; or
- safety disconnection for non-prescribed electrical works.

Where the request for disconnection is received by us before 3pm, the disconnection will occur within 2 business days or the earliest permissible day thereafter.

#### **B.1.6 Manual Re-energisation**

A re-energisation charge applies when a request is received to re-energise a supply point for fuses less than 100 amps are re-energised by a field visit.

Three options for re-energisation are available:

- reconnections (same day) business hours only;
- reconnections (incl. customer transfer) business hours; and
- reconnections (incl. customer transfer) after hours.

If the reconnection is required on the same day and we receive the request before 3pm, the 'reconnections (same day) business hours' charge will be applied and the reconnection will occur that day.

If the reconnection is required on the same day as requested and received by us between 3pm and 9pm the 'reconnections (incl. customer transfer) after hours' charge is applied.



If the reconnection is required for the next business day and we receive the request before 3pm on the previous business day the 'reconnections (incl. customer transfer) business hours' charge is applied.

In the instance that a customer does not provide reasonable access or where equipment is not in a reasonable state, the customer will be charged for the requested service however, supply will not be re-energised. Before the service can be provided, the customer may need to undertake rectification works. When the issue(s) have been resolved another request will need to be raised and a new charge will apply.

In a normal instance a re-energisation is performed by a special reader. However, there are scenarios where a service truck visit may be required and accordingly a service truck visit charge will be applied.

Some examples where a truck or other resource may be required include:

- special reader resource is not available after hours and an alternative time is not acceptable to the customer;
- no access to distribution equipment - metering and main fuse, including a veranda restricting access to the main fuse;
- no isolation point is available, therefore requiring disconnection at the pole;
- multiple NMIs fused at a common isolation point;
- CT metered site;
- isolation point in restricted area – substation; or
- safety reconnection for non-prescribed electrical works.

The charge will not be applied when:

- the customer changes retailer on a scheduled read; or
- the customer changes name; and
- a field visit is not necessary.

#### **B.1.7 Wasted attendance – not distributor fault (servicing)**

The wasted attendance charge will apply where we receive a request for a service truck and:

- the servicing crew arrives to find the site is not ready for the scheduled work within 15 minutes of arriving;
- the truck attendance is no longer required once on site;
- 24 hours notice is not provided for a cancellation;
- the site is locked with a non-industry lock;
- asbestos removal or warning on site;
- scaffolding obstructs the meter position prohibiting the installation of an overhead service;
- non adherence to VESI Service and Installation Rules; or
- other issues associated with safety assessment of the site.

A wasted truck visit charge will apply where we receive a request for a service truck to complete an abolishment <100 amps or abolishment >100 amps and one of the events above occurs.

Once the site is ready for the service truck visit, another appointment needs to be booked and the normal service truck visit charge applies.

Business hours and after hours charges apply where appropriate.

### **B.1.8 Service truck visit (servicing)**

Service truck visit charges apply when a service crew is requested for up to an hour in a number of circumstances including:

- disconnection of complex site (refer Manual De-energisation of existing connections);
- reconnection of complex site (refer Manual Re-energisation);
- metering additions or alternations; and
- shutdowns.

Larger scale works will be charged through a quoted service 'after hours truck by appointment' charge (refer to After hours truck by appointment). Where the job unexpectedly exceeds 1 hour, additional half hourly intervals will be charged up to two hours.

A service truck visit charge is not applicable to an appointment made to upgrade a basic meter site to a CT meter site. In this situation a quoted service charge will apply.

Customers are not charged when a service truck is sent to attend emergency and fault calls, unless the customer is clearly at fault, for example, not checking that main switch or safety switch is on.

In the instance where a service truck visit is requested and the truck arrives to find the site is not ready for work to be carried out then a wasted attendance charge will apply (refer to Wasted attendance – not distributor fault (servicing)).

### **B.1.9 Access to meter data**

The access to meter data charge applies when a request is received from a customer more than four times in any given 12 month period; or in a different manner or form than specified in the Australian Energy Market Operator (AEMO) metering data provision procedures; or by a customer authorised representative as part of a request for information about more than one customer.

Table B. 2 Fee based Ancillary Network services (nominal, GST exclusive)

Section reference	Alternative control service	Business hours \$	After hours \$
B.1.4	Contestable Meter / NMI investigation	413.99	474.28
B.1.6	Manual Re-energisation (incl. customer transfer)	54.62	241.25
B.1.6	Manual Re-energisation (same day)	89.01	N/A
B.1.5	Manual De-energisation (existing connections)	58.06	N/A
B.1.5	Manual De-energisation (disconnection for non-payment)	58.06	N/A
B.1.9	Access to meter data	48.72	N/A
B.1.8	Service truck visit (Servicing)	652.33	783.96
B.1.7	Wasted truck visit (Servicing)	358.82	414.59
<b>New Connection where we are the metering coordinator</b>			
B.1.2	Single phase	522.56	585.67
B.1.2	Multi-phase DC	647.17	710.27
B.1.2	Multi-phase CT	2,533.97	3,142.74
<b>New Connection where we are not the metering coordinator</b>			
B.1.3	Single phase	488.77	545.98
B.1.3	Multi-phase DC	613.37	670.58
B.1.3	Multi-phase CT	2,167.21	2,458.66

## B.2 Quoted Ancillary Network services

Quoted ancillary network services are charges levied on a time and materials basis where the services are highly variable. The following is considered to be quoted services:

- routine connections – customers > 100 amps;
- supply abolishment >100 amps;
- rearrangement of network assets at customer request, excluding alteration and relocation of existing public lighting assets;
- audit design and construction;
- specification and design enquiry;
- elective underground where above ground service currently exists;
- damage to overhead service cables caused by high load vehicles;
- high load escorts – lifting overhead lines;
- covering of low voltage mains for safety reasons;
- after hours truck by appointment; and
- reserve feeder maintenance.

Labour rates on which quotes are based on include:

- skilled electrical worker (BH & AH); and
- support staff.

All quoted services are based on the greater of actual hours worked or minimum chargeable hours, multiplied by the approved labour rates plus materials used and contractor charges.

### B.2.1 Routine connections – customer above 100 amps

A routine connections quoted service charge is applied when customers > 100 amps request a routine connection. This connection is only applicable if the requested supply capacity including the number of requested phases is available. The connection only requires an overhead service or the termination of consumer underground mains in an existing customer connection facility. Any work to provide augmentation either to provide capacity or to extend the network is requested and charged separately as a negotiated connection. Work contracted as a negotiated connection must be completed before a routine connection above 100 amps can occur.

Customers moving from direct connect metering to CT metering due to an increase in load on site will attract a quoted service for the removal of the direct connect meter and service for a new CT site connection. This is in addition to the augmentation project costs to upgrade the supply assets in the street to supply the additional load.

Charges apply where a request is made for a new supply connection at a specified address (including unmetered supply sites), except where the supply is for security lighting (also known as watchman lighting). This charge also applies where a builder wishes to provide permanent or temporary supply to new properties under construction.

For new premises an additional charge will apply for the checking of the installation for compliance to SIR and other related Connection Standards. Further, it does not include inspection of prescribed works for the purpose of issuing of a Certificate of Electrical Safety (**CES**); this should be organised by a Registered Electrical Contractor (**REC**). Separate charges will apply for additional truck or field officer visits to complete connection works.

In some circumstances traffic management will be required to comply with the Roads Management Act to provide the requested services. We can assist in arranging for traffic control and a pass through fee shall apply.

On occasions when a 'builders temporary supply' is installed and subsequently replaced with a permanent supply each new-connection is considered a distinct site visit and separate new-connection charges are applied, the first to the builder for establishing a new-connection for which the builder uses supply for construction purposes and a second new-connection charge to the customer for connecting the supply. This charge includes the removal/ disconnection of the overhead service / underground cable and meter supplying the temporary supply pole where applicable.

An additional attendance charge in the form of a wasted truck visit charge is applied in those situations where we have been to the site and returned to complete works that have been delayed due to the fault of the responsible party or their representative. Where an application for supply is made and the site is found to be defective, the wasted truck visit charge will be applied.

Where the determined maximum demand of any separately metered portion of an electrical installation exceeds 90 amps per active conductor, then CT metering will be required.

Customers moving from direct connect metering to CT metering due to an increase in load on site will attract a quoted service for the removal of the direct connect meter and service for a new CT site connection. This is in addition to the augmentation project costs to upgrade the supply assets in the street to supply the additional load.

#### **B.2.2 Supply abolishments above 100 amps**

The supply abolishment quoted service charge is applied when customers > 100 amps request a permanent removal of our supply assets. A separate charge applies per site.

#### **B.2.3 Rearrangement of network assets at customer request, excluding alteration and relocation of existing public lighting assets**

This charge is applied when a customer requests capital work for which the prime purpose is to satisfy a customer requirement other than new or increased supply, other than where Guideline 14 is applied.

For example:

- customer removal or relocation of service wire to allow work on private installation.

#### **B.2.4 Audit design and construction**

This charge may be applied when either a third party requests or we deem it necessary to review, approve or accept work undertaken by a third party.

The charge may be applied in situations including, but not limited to:

- customer provided buildings, conduits or ducts used to house our electrical assets;
- customer provided connection facilities including switchboards used in the connection of an electricity supply to their installation;
- any electrical distribution work completed by a Powercor approved contractor that has been engaged by a customer under Option 2 provisions;
- provision of system plans and system planning scopes, for Option 2 designers; and
- reviewing and/or approving plans submitted by Option 2 designers.

The charge may also be applied if we are requested to assess a contractor seeking VEDN or Option 2 contractor accreditation.

#### **B.2.5 Specification and design enquiry**

This charge may be applied where we determine an element of detailed design is required to fairly assess the costs so that an offer for connection services can be issued to the customer.

The charge is considered appropriate if uncertainty exists with respect to matters including, but not limited to:

- the route of the network extension required to reach the customer's property;
- the location of other utility assets;
- environmental considerations including tree clearing; and
- obtaining necessary permits from State and local government bodies.

The charge may also be applied where a customer requests us to provide information to assist them to undertake feasibility studies or to provide budget estimates.

#### **B.2.6 Elective underground where above ground service currently exists**

This charge applies when a customer with an existing overhead service requests an underground service, other than where Electricity Industry Guideline 14 is applied.

#### **B.2.7 Damage to overhead service cables caused by high load vehicles**

This charge applies to an identifiable third party when overhead service cables require repairing because they have been damaged by high load vehicles pulling down cables.

#### **B.2.8 High load escorts – lifting overhead lines**

This charge applies when a third party requires safe clearance of overhead lines to allow high load vehicles to pass along roads.

#### **B.2.9 Covering of low voltage mains for safety reasons**

This charge applies when customers request coverage of power lines for safety reasons. The charge applied will depend on the time taken to perform the service. Differing charges can arise as a result of the type of line being covered; street mains (two wires or all wire) or service cables.

#### **B.2.10 After hours truck by appointment**

This charge is applied to larger scale works requiring an after-hours service truck appointment.

Examples of types of works include:

- disconnection of complex site (refer to section for manual de-energisation of existing connections);
- reconnection of complex site (refer to section for manual re-energisation);
- metering additions or alterations; and
- shutdowns (includes preparation works).

#### **B.2.11 Reserve feeder maintenance**

The reserve feeder maintenance charge applies when a customer requests continuity of electricity supply should the feeder providing normal supply to their connection experience interruption.

The reserve feeder capacity is made available from an alternative feeder that has the available capacity to facilitate the requirements that the customer has nominated. The feeder facilitating reserve capacity may emanate from another zone substation or an alternative bus from the same zone substation facilitating electricity supply to the substation on the customer site.

The fee covers the operation and maintenance of the service, it does not include the capital required to implement or replace the service as this is covered in the connection agreement. The reserve feeder service will not be available to new customers.

**Table B. 3 Quoted services labour rates (nominal, GST exclusive)**

Alternative control charges	Business hours \$	After hours \$
Skilled electrical worker <sup>(1)</sup>	131.18	154.05
Support staff <sup>(1)</sup>	74.19	N/A

Note: (1) Quoted service labour categories include labour costs directly incurred in the provision of the service. An additional 31.36% will be applied to the direct labour rates for labour on-costs, fleet on-costs and overheads.

### B.3 Public lighting services

Charges apply for public lighting services provided to public lighting customers in accordance with the Victorian Public Lighting Code. The following services are included:

- operation of public lighting assets; including handling enquiries and complaints about public lighting and dispatching crews to repair public lighting assets; and
- maintenance, repair and replacement of public lighting assets.

Where a public lighting customer requests the replacement of a light with another light of a different type, then the activities required to fulfil this request fall outside of general OM&R activities. In this circumstance the following charges (rebates) are applied:

- replacement luminaire - WDV recovery (charge);
- replacement luminaire - avoided costs (rebate); and
- installation costs of new lights (a negotiated service).



Table B. 4 Public lighting services fee based (nominal, GST exclusive)

Public lighting charges	Annual charge (\$)
Replacement luminaire - WDV recovery	104.35
Replacement luminaire - avoided costs	-28.49
Mercury vapour 50 watt	76.69
Mercury vapour 80 watt	55.17
Mercury vapour 125 watt	74.48
Mercury vapour 250 watt	77.84
Mercury vapour 400 watt	90.14
Sodium 150 watt	100.75
Sodium 250 watt	102.43
Sodium 400 watt	136.23
Metal halide 70 watt	116.96
Metal halide 150 watt	133.99
Metal halide 250 watt	136.23
T5 2X14W	40.21
T5 2X24W	39.56
Compact Fluoro 32W	38.65
Compact Fluoro 42W	38.65
Category P LED Standard Output	25.99
Category P LED High Output	25.99

## B.4 Metering Coordinator services

As at 1 December 2017, the responsible person role is replaced by the metering coordinator role. We are the metering coordinator for types 5, 6 and 7 meters. We are responsible for metering coordinator services associated with types 5, 6 and 7 meters which are installed in residential and small commercial premises consuming up to 160 MWh per annum. The services provided in relation to these meters include:

- meter provision – includes purchasing meters and installing these meters at the customer's premise;
- meter maintenance – includes inspecting, testing, maintaining and repairing meters;
- meter replacement – replacement of a meter and associated equipment, at a site with existing metering infrastructure, with a modern equivalent where the meter has reached the end of its economic life;

- meter reading and data services – includes collection, processing, storage and delivery of metering data to other participants for billing and market settlement purposes and the management of the relevant National Meter Identifier (NMI); and
- meter communications – includes maintaining and installing communication devices required to operate the mesh radio network and management of the day to day operation of the meter communications systems including meter data delivery, testing, fault detection, investigation and resolution.

The fee based ancillary services charges that fall under metering include:

- meter provision charges;
- manual meter reading charge; and
- metering coordinator - alternative control services.

The charges for each Metering Coordinator service apply where uninhibited site access is granted. If access to the site is restricted then a service truck may be required therefore attracting a service truck fee.

#### **B.4.1 Meter Provision charges**

Meter provision charges are applied to all meters. This charge covers the cost of maintaining, operating and replacing the meter once it has reached the end of its economic life, as well as the collection, processing and delivery of meter data to market participants. The charge varies depending on the meter installed.

#### **B.4.2 Manual meter reading charge**

This charge applies to customers who have elected not to have their manually read meter replaced with a remotely read AMI meter.

#### **B.4.3 Meter exit fee**

The meter exit fee is charged for each meter at a premises which is converted to an embedded network.

#### **B.4.4 New Connection - where we are the metering coordinator**

A combined connection and meter installation service is provided by us as both the electricity distributor and the Metering Coordinator. We are therefore responsible for the metering.

#### **B.4.5 Meter investigation**

A meter investigation charge applies when a request is received to investigate the Metering Coordinator's metering at a given supply point. A need to investigate can arise in a number of situations, such as:

- interval data analysis;
- meter malfunction;
- wiring transposition investigation; and
- meter tampering or bypass.

#### **B.4.6 Meter testing**

A meter testing charge applies when a request is made to test the accuracy of a Metering Coordinator's meter at a given supply point. Different charges apply depending on the type of meter being tested, if it is the first or subsequent meter and whether the meter is single or multi-phase and whether the service is provided during or after business hours.

#### **B.4.7 Special meter reading**

The special meter reading charge applies when a request for a special meter read is to be performed by a field visit outside the scheduled meter reading cycle. Where customers have multiple metering installations, such as

farms and units, a separate charge applies to each meter on the property. This charge is only available during business hours.

#### **B.4.8 Wasted attendance – not distributor fault (metering)**

The wasted attendance charge will apply where we receive a request for a service truck and:

- the metering crew arrives to find the site is not ready for the scheduled work within 15 minutes of arriving;
- the truck attendance is no longer required once on site;
- 24 hours notice is not provided for a cancellation;
- the site is locked with a non-industry lock;
- asbestos removal or warning on site;
- scaffolding obstructing meter position;
- non adherence to VESI Service and Installation Rules; or
- other issues associated with safety assessment of the site.

A wasted truck visit will apply where we receive a request for a service truck to complete an abolishment <100 amps or abolishment >100 amps and one of the events above occurs.

Once the site is ready for the service truck visit, another appointment needs to be booked and the normal service truck visit charge applies.

Business hours and after hours charges apply where appropriate.

#### **B.4.9 Service truck visit (metering)**

Service truck visit charges apply when a metering crew is requested for up to an hour in a number of circumstances including:

- disconnection of complex site (refer to section for manual de-energisation of existing connections);
- reconnection of complex site (refer to section for manual re-energisation);
- metering additions or alternations; and
- shutdowns.

Larger scale works will be charged through a quoted service 'after hours truck by appointment' charge (refer to After hours truck by appointment). Where the job unexpectedly exceeds 1 hour, additional half hourly intervals will be charged up to two hours.

A service truck visit charge is not applicable to an appointment made to upgrade a basic meter site to a CT meter site. In this situation a quoted service charge will apply.

Customers are not charged when a service truck is sent to attend emergency and fault calls, unless the customer is clearly at fault, for example, not checking that main switch or safety switch is on.

In the instance where a service truck visit is requested and the truck arrives to find the site is not ready for work to be carried out then a wasted attendance charge will apply (refer to Wasted attendance – not distributor fault (metering)).

#### **B.4.10 Remote reconfiguration**

The remote reconfiguration charge applies when a request is received to reconfigure a smart meter and has the related infrastructure in place.

#### B.4.11 Remote De-energisation

The remote de-energisation charge applies when a request is received to de-energise a customer that has smart metering and related infrastructure in place which is then used to remotely disconnect the customer from our network.

#### B.4.12 Remote re-energisation

The remote re-energisation charge applies when a request is received to re-energise a customer that has smart metering and related infrastructure in place which is then used to remotely reconnect the customer to our network.

Table B. 5 Metering Provision charges (nominal, GST exclusive)

Metering charges	\$/NMI/p.a.
Single phase meter	73.00
Three phase direct connected meter	80.30
Three phase CT connected meter	127.75

Table B. 6 Manual meter reading charge (nominal, GST exclusive)

Manual meter reading charges	\$/read
Manual meter reading	47.96

Table B. 7 Metering exit fees (nominal, GST exclusive)

Metering exit fees	\$/NMI
AMI 1P	412.91
AMI 3P	508.85
AMI 3P CT	1,036.94
Basic or MRIM all	43.32

Source: AER

**Table B. 8    Metering Coordinator Alternative Control Services (nominal, GST exclusive)**

Section reference	Alternative control service	Business hours \$	After hours \$
B.4.5	Meter investigation	413.99	474.28
B.4.6	Meter accuracy test - single phase	457.07	524.87
B.4.6	Meter accuracy test - single phase additional meter	191.81	N/A
B.4.6	Meter accuracy test - multi phase	550.69	634.82
B.4.6	Meter accuracy test - multi phase additional meter	349.75	N/A
B.4.6	Meter accuracy test - CT	644.89	745.44
B.4.7	Special reading	47.96	N/A
B.4.9	Service truck visit (Metering)	652.33	783.96
B.4.8	Wasted truck visit (Metering)	358.82	414.59
B.4.10	Remote meter reconfiguration	56.85	N/A
B.4.12	Remote re-energisation	10.72	N/A
B.4.11	Remote de-energisation	10.72	N/A

# C Glossary

Table C.1 Glossary

Term	Definition
AEST	Australian Eastern Standard Time is 10 hours ahead of UTC
Active Market Interval Read Meter	A meter that records energy use over short intervals and communicates the data to the energy supplier and is operating in the national energy market as an interval meter
AMI	Advanced Metering Infrastructure
ARR	Annual revenue requirement
CES	Certificate of Electrical Safety
Controlled Load	The DNSP controls the hours in which the supply is made available
DMIS	Demand management incentive scheme
DNP	Disconnection for non-payment
DPPC	Designated pricing proposal charges
DUoS	Distribution use of system
Final decision	The Australian Energy Regulator's final decision determination 2016 to 2020, May 2016
FiT	Feed in Tariff
Flexible Pricing	Flexible pricing means different rates for electricity at different times of the day as defined by the Victorian Governments policy on ToU pricing
GP&L	General Power & Light
Guideline 14	Electricity Industry Guideline 14, Provision of Services by Electricity Distributors, 13 April 2004
JUoS	Jurisdictional scheme use of system
kVA, MVA	Kilovolt amperes and Megavolt amperes, units of instantaneous total electrical power demand. Usually the peak demand is referenced. See also PF for the relationship between power demand quantities
kVAr, MVAR	Kilovolt amperes (reactive) and Megavolt amperes (reactive) units of instantaneous reactive electrical power demand. Usually the peak demand is referenced. See also PF for the relationship between power demand quantities
kW, MW	Kilowatt and Megawatt, units of instantaneous real electrical power demand. Usually the peak demand is referenced. See also PF for the relationship between power demand quantities
kWh, MWh	Kilowatt hour and Megawatt hour, units of electrical energy consumption
Local Time	Daylight saving time in accordance with the Victorian Government's requirements
Low voltage (LV)	Equipment or supply at a voltage of 220 V single phase or 415 V, three phase
LRMC	Long Run Marginal Costs
Marginal Cost	The cost of providing a small increment of service. The Long Run Marginal Cost (LRMC) includes future investment; Short Run Marginal Cost (SRMC) considers only the costs involved without extra investment
NMI	National Meter Identifier
NUoS	Network use of system. The utilisation of the total electricity network in the provision of electricity to consumers (NUoS = DUoS + TUoS + JUoS)
OM&R	Operation, maintenance and replacement

Term	Definition
PFiT	Premium Feed-in tariff
Power factor (PF)	<p>A measure of the ratio of real power to total power of a load. The relationship between real, reactive and total power is as follows:</p> $PF = \text{Real Power (kW)} / \text{Total Power (kVA)}$ $\text{Total Power kVA} = \sqrt{kW^2 + kVAR^2}$
Preliminary determination	The Australian Energy Regulator's preliminary distribution determination 2016 to 2020, October 2015
PTRM	Post tax revenue model
REC	Registered Electrical Contractor
Revenue cap	A form of regulatory control which limits the total revenue in a given period.
Rules	Australian Energy Market Commission, National Electricity Rules (NER)
STPIS	Service target performance incentive scheme
TAR	Total annual revenue
ToU	Tariff whereby charges (energy or demand) vary depending on time
Transmission Network	The assets and service that enable generators to transmit their electrical energy to population centres
TSS	Tariff structure statement
TUoS	Transmission Use of System
Unmetered supply	A connection to the distribution system which is not equipped with a meter and has estimated consumption. Connections to public lights, phone boxes, traffic lights and the like are not normally metered
WDV	Written down value

# D Attachments

Table D.1 Attachments

Reference	Topic	Final name	Confidential
Attachment A	Revenue Cap Compliance Model	Attachment_A-2019_Tariff_Approval_Model_PAL.xlsm	No
Attachment B	Alternative Control Services	Attachment_B-2019_ACS_Charges_PAL.xlsx	No
Attachment C	Public lighting	Attachment_C-2019_PublicLighting_Charges_PAL.xlsm	No
Attachment D	Deloitte Audit – 2017 TUOS, JUOS	Powercor - Deloitte report 2019 tariff submission.pdf	No