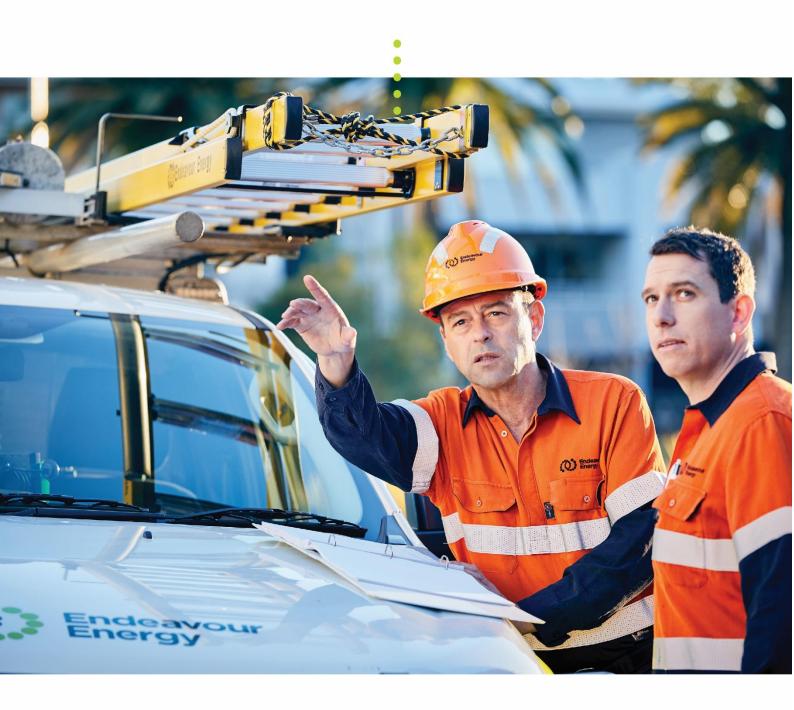
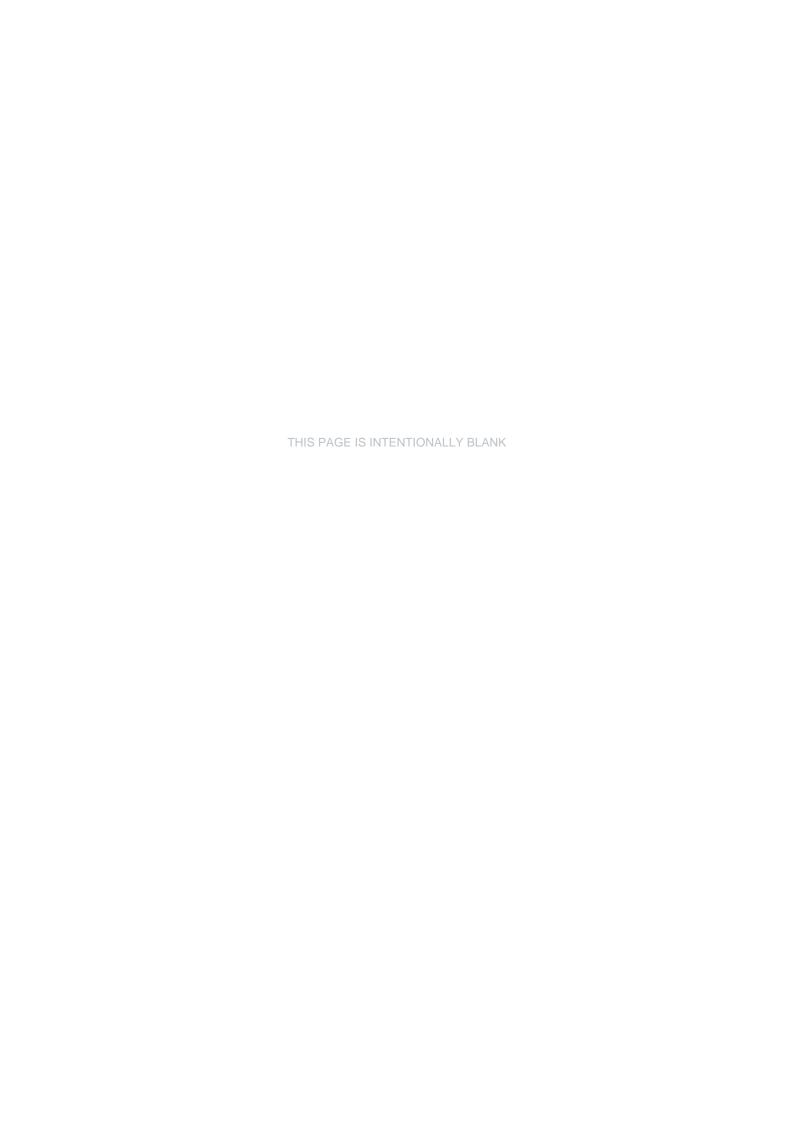
## **Tariff Structure Statement 1 July 2019 – 30 June 2024**









#### **Table of contents**

1.0	ABOUT THIS TARIFF STRUCTURE STATEMENT	4
1.1	Introduction	5
1.2	Structure of this TSS	6
2.0	TARIFF CLASSES AND ASSIGNMENT POLICIES	7
2.1	Tariff classes	8
2.2	Allocation of customers to tariff classes	10
3.0	STRUCTURE AND CHARGING PARAMETERS	12
3.1	Tariff structures and assignment	13
3.2	Proposed charging parameters	18
4.0	APPROACH TO SETTING TARIFFS	27
4.1	Tariff Setting Methodology	28
4.2	Revenue is between stand-alone and avoidable cost for each tariff class	30
4.3	Estimating long-run marginal cost	31
4.4	Tariffs reflect the efficient costs of providing the services	33
4.5	Tariffs mitigate impact on customers	34
APPE	NDIX 1: GLOSSARY	35
APPE	NDIX 2: COMPLIANCE CHECKLIST	37
APPEI	NDIX 3: INDICATIVE PRICING SCHEDULE	44



# About this Tariff Structure Statement

CHAPTER 1



#### 1.1 Introduction

Endeavour Energy is submitting this Tariff Structure Statement (TSS) to the Australian Energy Regulator (AER) in accordance with the requirements of the National Electricity Rules (the Rules).

We have also submitted a Tariff Structure Explanatory Statement (TSES) that provides our reasons for proposing the tariff structures in this document and explains how they are compliant with the Rules.





#### 1.2 Structure of this TSS

Endeavour Energy's TSS is structured as follows:

Table 1 - Structure of this document

Chapter	Title	Purpose
2	Tariff classes and assignment policies	This section provides a purpose and structure for this TSS
3	Structure and charging parameters	The structure and charging parameters for our tariffs are set out in this section in addition to the policies and procedures for assigning retail customers to tariffs
4	Approach to setting tariffs	This section describes our approach to setting tariffs which includes calculating avoided and stand alone cost, estimating LRMC and other associated issues relating to setting tariffs
A1	Glossary	This provides a definition for some key terms used throughout this TSS
A2	Compliance checklist	This section sets out a checklist that identifying where each of the TSS Rule Requirements are met in this submission
A3	Indicative pricing schedule	This section sets out indicative prices for the regulatory control period





# Tariff classes and assignment policies

**CHAPTER 2** 



This section sets out the tariff classes into which retail customers for direct control services will be divided, and the policies and procedures we will apply for assigning retail customers to tariff classes.1 The policies and procedures for assigning retail customers to tariffs are set out in section 3.1.

#### 2.1 Tariff classes

Our tariff classes for these customers are set on the basis of:2

- the nature of the customers' connection to the network, i.e., whether they are high or low voltage customers or whether they are metered or unmetered; and
- the nature and extent of customers' usage, i.e., above or below a specified level of consumption per annum.

A summary of our network tariff classes is set out in the table below:

Table 2 - Endeavour Energy network tariff classes

Customer type	Tariff class	Connection characteristics
Residential and small to medium enterprise businesses	Small Low Voltage	LV Connection (230/400 V) Total electricity consumption, per financial year, is less than 160MWh
Larger commercial and light industrial	Large Low Voltage	LV Connection (230/400 V) Total electricity consumption, per financial year, is greater than 160MWh
Industrial	High Voltage Demand	HV Connection (12.7 kV SWER, 11 or 22 kV)
Industrial	Subtransmission Demand	ST Connection (33, 66 or 132 kV)
Distributors	Inter-Distributor Transfer Demand	Distributor Transfer
Unmetered	Unmetered Supply	Unmetered

In addition to our standard control services, Endeavour Energy provides customer specific or customer requested services, and so the full cost of the service is attributed to that particular customer. These are referred to as alternative control services. One of the defining characteristics of these services is that the AER determines the price for the service or the unit rates used in quoting for a service.

The AER has classified the following categories of direct control services as alternative control services:

- ancillary network services;
- metering;
- public lighting; and
- security lights (Nightwatch).



 $<sup>^{\</sup>rm 1}$  Clause 6.18.1A(a)(1) and 6.18.1A(a)(2) of the Rules.  $^{\rm 2}$  As required under the Rules, Clause 6.18.4(a)(1).

Endeavour Energy proposes that customers that use these categories of service form our alternative control service tariff classes. A summary is set out in the table below:

Table 3 - Endeavour Energy alternative control tariff classes

Customer type	Tariff class	Service characteristics
Retailers and ASPs on behalf of customers	Ancillary Network Services	Would include authorisations, inspections, permits, site establishment, connections/disconnections and conveyancing information. Service is initiated only at customer request.
Low voltage customers consuming less than 160MW p.a.	Metering	Provision of Type 5 and Type 6 metering assets.  Meter reading services for Type 5 and 6 metering assets.  Retirement of Type 5 and 6 metering assets.
Public space illuminators (generally local councils)	Public Lighting	Provision of public lighting infrastructure.  Maintenance of public lighting infrastructure.  Retirement of public lighting infrastructure.
Customer requested flood lighting services	Security Lights (Nightwatch)	Provision of lighting infrastructure.  Maintenance of lighting infrastructure.  Supply of energy for lighting service.





#### 2.2 Allocation of customers to tariff classes

The process under which new customers are assigned to network tariff classes and network tariffs occurs following the receipt of a connection application by the customer or their retailer. Under our process, a customer that lodges an application to modify or upgrade an existing network connection from single to three-phase or upgrades their connection to a bi-directional flow is treated identically to a new customer.

These procedures are set out below.

## Assignment of existing customers to tariff classes at the commencement of the next regulatory control period

1. Each customer who was a customer of Endeavour Energy immediately prior to 1 July 2019, and who continues to be a customer of Endeavour Energy as at 1 July 2019, will be taken to be "assigned" to the tariff class which Endeavour Energy was charging that customer immediately prior to 1 July 2019.

#### Assignment of new customers to a tariff class during the next regulatory control period

- 2. If, after 1 July 2019, Endeavour Energy becomes aware that a person will become a customer of Endeavour Energy, then Endeavour Energy will determine the tariff class to which the new customer will be assigned.
- 3. In determining the tariff class to which a customer or potential customer will be assigned, or reassigned, in accordance with paragraph 2 or 5, Endeavour Energy will take into account one or more of the following factors:
  - a) the nature and extent of the customer's usage;
  - b) the nature of the customer's connection to the network; and
  - c) whether remotely–read interval metering or other similar metering technology has been installed at the customer's premises as a result of a regulatory obligation or requirement.
- 4. In addition to the requirements under paragraph 3, Endeavour Energy, when assigning or reassigning a customer to a tariff class, will ensure the following:
  - a) that customers with similar connection and usage profiles are treated equally;
  - b) that customers which have micro–generation facilities are not treated less favourably than customers with similar load profiles without such facilities; and
  - the national pricing objective and the distribution pricing principles which direct that tariffs charged by a distributor for direct control services should reflect the distributor's efficient costs of providing these services to the customer.

### Reassignment of existing customers to another existing or a new tariff during the next regulatory control period

5. If Endeavour Energy believes that an existing customer's load characteristics or connection characteristics (or both) are no longer appropriate for that customer to be assigned to the tariff class to which the customer is currently assigned or a customer no longer has the same or materially similar load or connection characteristics as other customers on the customer's existing tariff, then Endeavour Energy may reassign that customer to another tariff class.

#### Notification of proposed assignments and reassignments

6. Endeavour Energy will notify the customer's retailer in writing of the tariff class to which the customer has been assigned or reassigned, prior to the assignment or reassignment occurring.



- 7. A notice under paragraph 6 above must include advice informing the customer's retailer that they may request further information from Endeavour Energy and that the customer's retailer may object to the proposed reassignment. This notice must specifically include reference to Endeavour Energy's published procedures for customer complaints, appeals and resolution.
- 8. If the objection is not resolved to the satisfaction of the customer's retailer under the Endeavour Energy's internal review system or EWON, then the retail customer is entitled to seek a decision of the AER via the dispute resolution process available under Part 10 of the NEL.
- 9. If, in response to a notice issued in accordance with paragraph 7 above, Endeavour Energy receives a request for further information from a customer's retailer, then it must provide such information within a reasonable timeframe. If Endeavour Energy reasonably claims confidentiality over any of the information requested by the customer's retailer, then it is not required to provide that information to the retailer or retail customer. If the customer's retailer disagrees with such confidentiality claims, it may have resort to the dispute resolution procedures referred to in paragraph 7 above (as modified for a confidentiality dispute).
- 10. If, in response to a notice issued in accordance with paragraph 7 above, a customer's retailer makes an objection to Endeavour Energy about the proposed assignment or reassignment, Endeavour Energy must reconsider the proposed assignment or reassignment. In doing so Endeavour Energy must take into consideration the factors in paragraphs 3 and 4 above, and notify the customer's retailer in writing of its decision and the reasons for that decision.
- 11. If a customer's retailer objection to a tariff class assignment or reassignment is upheld, in accordance with Endeavour Energy's published procedures for customer complaints, appeals and resolution then any adjustment which needs to be made to tariffs will be done by Endeavour Energy as part of the next annual review of prices.

#### System of assessment and review of the basis on which a customer is charged

12. Where the charging parameters for a particular tariff result in a basis of charge that varies according to the customer's usage or load profile, Endeavour Energy will set out in its pricing proposal a method of how it will review and assess the basis on which a customer is charged.





## Structure and charging parameters

CHAPTER 3





This section sets out the structure of our tariffs and how customers are assigned to them, in additional to the charging parameters for each of our tariffs.

#### 3.1 Tariff structures and assignment

A summary of the type of tariffs offered for customers in each of our tariff classes and a description of the customers that are eligible for each is set out below.<sup>3</sup>

An indicative pricing schedule for each of our tariff classes, setting out the parameters of each of our tariffs over the regulatory period is set out in Appendix 3.

#### 3.1.1 Small low voltage tariff class

The tariff structures available for residential customers in the small low voltage tariff class are:

- a flat energy tariff with a fixed charge for residential consumers;
- a transitional demand tariff, which has a seasonal demand based charge, a flat energy consumption charge and a fixed charge;
- a demand tariff, which has a seasonal demand based charge, a flat energy consumption charge and a fixed charge; and
- a seasonal time of use energy tariff, which has seasonal time of use energy consumption charges and a fixed charge.
- An obsolete time of use energy tariff that has time of use energy consumption charges (under our existing, obsolete charging windows) and a fixed charge. This tariff is closed to new entrants. Customers on this tariff will be reassigned to the default demand cost-reflective tariff as a priority or the STOU if the bill impacts do not allow. This transition is expected to occur by year three of the regulatory control period.

The tariff structures available for non-residential customers in the small low voltage tariff class are:

- an IBT with a fixed charge for small to medium commercial customers;
- a transitional demand tariff, which has a seasonal demand based charge, a flat energy consumption charge and a fixed charge; and
- a demand tariff, which has a seasonal demand based charge, a flat energy consumption charge and a fixed charge.
- a seasonal time of use energy tariff, which has seasonal time of use energy consumption charges and a fixed charge.
- An obsolete time of use energy tariff that has time of use energy consumption charges (under our existing, obsolete charging windows) and a fixed charge. This tariff is closed to new entrants. Customers on this tariff will be reassigned to the default demand cost-reflective tariff as a priority or the STOU if the bill impacts do not allow. This transition is expected to occur by year three of the regulatory control period.

We will continue to offer our optional controlled load tariffs – these tariffs apply to any customer that has a residential or general supply tariff – the electricity load is separately metered and controlled at a connection point.

Our tariff assignment policy aims to place our customers on the most appropriate tariff. From 1 July 2019:

 new customers (all of whom will have <u>smart</u> interval meters under competitive metering) will be assigned to the default transitional demand tariff, with the option to opt-out to the <u>alternate cost</u> <u>reflective tariffs or the</u> flat energy tariff;

<sup>&</sup>lt;sup>3</sup> During the TSS period, Endeavour Energy may need to introduce new tariff codes for billing purposes. Any new tariff codes introduced will comply with the tariff structures outlined in this document for each tariff class and the price level for NUOS services will equate to the tariff type under which the new tariff code has been created.



- existing customers that have their meter upgraded to a smart interval meter post 1 July 2019
   can be identified as having upgraded their network connection to 3-phase or bi-directional flow
   will be assigned to the default transitional demand tariff, with the option to opt-out to the
   alternate cost reflective tariffs or the flat energy tariff; and
- existing customers with interval meters will remain on their existing tariff (i.e., a flat tariff or IBT as appropriate), with the option to opt-in to the transitional demand tariff, demand tariff or STOU tariff.

#### 3.1.2 Large low voltage tariff class

The tariff structures available within the large low voltage tariff class are:

- a demand tariff, which has a seasonal demand based charge, seasonal time of use energy consumption charges and a fixed charge; and
- a transitional energy tariff with seasonal time of use energy consumption charges and a fixed charge.

The demand tariff is the default tariff for customers that consume more than 160MWh per annum.

The transitional large LV demand tariff is a mandated transitional tariff for customers whose annual consumption requires a demand based tariff, but who cannot be directly transferred to the default demand tariff due to a lack of metering capable of supporting this tariff or where the expected bill impact of a direct transition to the demand tariff is deemed excessive. The transition tariff is not available on customer or retailer request.

#### 3.1.3 High voltage demand tariff class

The tariff structures available within the High Voltage (HV) Demand tariff class are:

- a HV demand tariff, which has a seasonal demand based charge, seasonal time of use energy consumption charges and a fixed charge; and
- an individually calculated HV demand tariff with the same structure as the HV demand tariff.

Our HV demand tariff is the default tariff for customers where electricity is supplied at a voltage level defined as high voltage.

Our individually calculated HV demand tariff is a customer specific tariff applied where the customer's:

- electricity consumption has been equal to or greater than 100 GWh in total for the 36 months preceding the application; or
- electricity consumption has been equal to or greater than 40 GWh per annum in each of the two financial years preceding the application; or
- monthly peak demand has been equal to or greater than 10 MVA for 24 of the 36 months preceding the application.

#### 3.1.4 Subtransmission demand tariff class

We plan to offer two network tariff types within the subtransmission demand tariff class:

- a ST demand tariff, which has a seasonal demand based charge, seasonal time of use energy consumption charges and a fixed charge; and
- an individually calculated ST demand tariff with the same structure as the ST demand tariff.

Our ST demand tariff is the default tariff for customers where electricity is supplied at a voltage level defined as subtransmission voltage.

Our individually calculated ST demand tariff is a customer specific tariff applied where the customers:



- electricity consumption has been equal to or greater than 100 GWh in total for the 36 months preceding the application; or
- electricity consumption has been equal to or greater than 40 GWh per annum in each of the two financial years preceding the application; or
- monthly peak demand has been equal to or greater than 10 MVA for 24 of the 36 months preceding the application.

#### 3.1.5 Inter-distributor transfer demand tariff class

We plan to offer one network tariff type within the inter-distributor tariff class, being the inter-distributor demand tariff. This tariff is a mandated, distributor specific demand tariff for electricity transferred through the Endeavour Energy network on behalf of Ausgrid and Essential Energy.

#### 3.1.6 Unmetered supply

We plan to offer one network tariff type within the Unmetered Supply tariff class, being an unmetered energy tariff.

We plan to offer four unmetered energy tariffs for the specific purpose of:

- unmetered energy (the default tariff for customers in this tariff class);
- streetlighting connection points;
- traffic control signal lights connection points; and
- nightwatch connection points.

#### 3.1.7 Alternative control services

#### **Ancillary network services**

Ancillary service prices are provided to customers as either of the following:

- Fee based services: the work involved in some ancillary service activities are relatively fixed and are charged on a per activity basis. Fees are derived from the relevant labour rates and average time required to perform the task and are charged irrespective of the actual time taken to complete the activity; and
- Quoted services: costs for some ancillary service activities may vary considerably between jobs. This is often the case for one-off activities that are specific to a particular customer's request. For quoted services, charges are levied on a time and materials basis. Prior to commencing work, customers are informed of the per hour cost with the final total charge payable dependent on the time taken to complete the respective activity.

For the 2019-24 period, we propose to provide most of the ancillary service activities that were provided to customers in the current regulatory period. We have also proposed to provide several new activities to reflect recent regulatory and service classification changes that require us to provide them to our customers.

We propose the following forms of control for ancillary network services over the 2019-24 regulatory period consistent with the AER's F&A decision, i.e.:

- a schedule of fixed prices for ancillary network services for the first year of the regulatory period;
   and
- a price path for the remaining years of the regulatory control period, based on the CPI-X methodology contained in the submitted ancillary network services model.

Further detail on our ancillary network services proposal can be found in chapter 2.5 of our Revised Regulatory Proposal.



Our proposed charges for our ancillary network services for the 2019-24 period are set out in Attachment 0.17 of our Revised Regulatory Proposal.

#### Metering

Our proposed pricing approach is the same as that which applied for the 2014-19 period for the same reasons. To summarise, we have split metering services between primary and secondary categories. The latter are metering services that are in addition to the basic network service most customers receive, such as off-peak hot water or solar PV meter services. These additional services result in only marginally higher overall costs and therefore attract a lower incremental charge.

This means that a customer will pay a greater amount for their first metering service as this creates the majority of costs we incur as their meter provider. This approach also ensures that customers who have more metering services than a basic accumulation service will pay more to reflect the additional services being provided. We consider this balances the need for cost reflectivity and fairness. Our approach involves the following:

- Existing metering assets: we will seek to recover the existing capital costs for Type 5 and 6 meters during the course of the 2019-24 period. The collection of existing meter costs will be on a per-customer basis to avoid penalising customers for past decisions; and
- Opex: ongoing costs such as maintenance, meter reading, meter testing and data services will
  be recovered via a cents per day charge. The prices for ongoing opex have been developed on
  a per-service basis. This means that each unique data stream will attract a price. For example,
  a basic metering charge and an off-peak metering charge equates to two data streams and two
  services.

We propose the following forms of control for metering services over the 2019-24 regulatory period consistent with the AER's F&A decision, i.e.:

- a schedule of fixed prices for metering services for the first year of the regulatory period; and
- a price path for the remaining years of the regulatory control period, based on the CPI-X methodology contained in the submitted metering services model.

Further detail on our metering proposal can be found in chapter 2.5 of our Revised Regulatory Proposal.

Our proposed charges for our metering services for the 2019-24 period are set out in Attachment 0.18 of our Revised Regulatory Proposal.

#### **Public lighting**

We propose to continue applying the current tariff structures and component based pricing over the next regulatory period, based on supportive feedback provided by councils in our network area on the current structures. The tariff classes are broken down into two key subgroups, tariffs for assets installed before 8 August 2009 and those after this date:<sup>4</sup>

- Tariff class 1: is an aggregate capital recovery and maintenance tariff. This applies where the
  asset was initially funded by us and was included as part of the RAB determined by IPART prior
  to 8 August 2009. Capital cost recovery built into this tariff class will trend in line with the
  residual RAB value reducing over time and historical price escalation constraints. Assets priced
  under tariff class 1 may sometimes also be referred to as legacy assets. No new public lighting
  installations are covered by this tariff class;
- Tariff class 2: is a maintenance cost recovery only tariff. This applies to assets where we did
  not fund the initial construction which occurred prior to 8 August 2009. As we did not fund the
  construction we are not entitled to any capital recovery charges for these assets. Similarly with
  tariff class 1, assets priced under tariff class 2 may sometimes also be referred to as legacy
  assets. No new public lighting installations are covered by this tariff class;
- **Tariff class 3:** is an aggregate capital recovery and maintenance tariff similar to tariff class 1, however this tariff class is priced using an annuity approach and only applies to assets installed

<sup>&</sup>lt;sup>4</sup> Even though the AER cut-off date for switchover of charges from legacy rates to annuity rates was 1 July 2009, on demand from its Public Lighting Customers and ASPs, Endeavour Energy agreed to a date of 8 August 2009 to cater for completion of projects that were already under way and to give time for Public Lighting Customers and ASPs to understand the new rates.



after 8 August 2009. Unlike tariff class 1 there is no RAB value driving variable prices over time and is specific to the asset installed;

- Tariff class 4: is a two part tariff; the first element is a maintenance cost recovery only charge similar to tariff class 2. This applies to assets where we did not fund their initial construction which occurred after 8 August 2009. As we did not fund the construction we are not entitled to any capital recovery charges for these assets. However, we are required to pay income tax on assets gifted to us in this manner. The second element of tariff class 4 is a tax cost recovery charge that is paid through an annual amount over the life of an asset that is gifted to us by our customers after 8 August 2009; and
- Tariff class 5: is a pure capital recovery tariff that is paid in a lump sum at the time of agreeing to replace an asset before the end of its useful life. This tariff class does not have specified prices but rather a specified formula for calculating the residual unrecovered capital and tax costs when a customer requests an early replacement of assets paid for by us.

We propose the following forms of control for public lighting services over the 2019-24 regulatory period consistent with the AER's F&A decision, i.e.:

- a schedule of fixed prices for public lighting services for the first year of the regulatory period;
   and
- a price path for the remaining years of the regulatory control period, based on the CPI-X methodology contained in the submitted public lighting model.

Further detail on our public lighting proposal can be found in chapter 2.5 of our Revised Regulatory Proposal.

Our proposed charges for our public lighting services for the 2019-24 period are set out in Attachment 0.16 of our Revised Regulatory Proposal.

#### **Security lights (Nightwatch)**

For the purposes of transitioning this service to regulation by the AER we have proposed a forward looking pricing methodology for security lights similar to that of public lighting tariff 3. Customers are required to pay a one-off installation cost and a monthly rental charge. These charges will vary depending on the type of lighting service requested and length of the contractual period. The ongoing charge will cover the costs of operating, maintaining and replacing the assets as required.

We propose the following forms of control for ancillary network services over the 2019-24 regulatory period consistent with the AER's F&A decision, i.e.:

- a schedule of fixed prices for ancillary network services for the first year of the regulatory period;
- a price path for the remaining years of the regulatory control period, based on the CPI-X methodology contained in the submitted ancillary network services model.

Further detail on our security lights (Nightwatch) proposal can be found in chapter 2.5 of our Revised Regulatory Proposal.

Our proposed charges for our security lights (Nightwatch) services for the 2019-24 period are unchanged from the AER's draft decision.





#### 3.2 Proposed charging parameters

#### 3.2.1 Small low voltage tariff class

The charging parameters for the proposed tariffs for our low voltage customers in this tariff class are set out in the table below.

Table 4 - Charging parameters for the small low voltage tariff class

Tariff type	Components	Measurement	Charging parameter <sup>5</sup> .6
Residential	Fixed	c/day	Access charge reflecting a fixed amount per day.
Flat Tariff	Energy	c/kWh	Charge applied to all energy consumption.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
	Energy	c/kWh	Charge applied to all energy consumption.
Residential Transitional Demand	High-season Demand	\$/kW/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  High-season includes the months November to March inclusive.
	Low-season Demand	\$/kW/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  Low-season includes the months April to October inclusive.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
Residential	Energy	c/kWh	Charge applied to all energy consumption.
Demand	High-season Demand	\$/kW/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  High-season includes the months November to March inclusive.

<sup>&</sup>lt;sup>5</sup> Endeavour Energy has displayed block tariff consumption thresholds on a MWh per annum basis. In practice, this annualised consumption threshold will be calculated on a pro-rata basis corresponding to the billing period.
<sup>6</sup> Endeavour Energy has displayed demand tariffs in \$/kW or kVA/month terms as this is compatible with our current billing system. Endeavour Energy is currently in the process of changing our billing system with the transition expected early in this TSS period. It is possible, but unconfirmed at the time of writing, that under the new billing system demand prices may need to be expressed on a cents/kW or kVA/day basis. While the way the price is expressed may need to change, the demand price will still apply to the customer's maximum monthly demand.



Tariff type	Components	Measurement	Charging parameter <sup>5_6</sup>
	Low-season Demand	\$/kW/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  Low-season includes the months April to October inclusive.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
Residential	High-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.  High-season includes the months November to March inclusive.
STOU	Low-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.  Low-season includes the months April to October inclusive.
	Off Peak Energy	c/kWh	Charge applied to energy consumed at all other times.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
Obsolete Residential	Peak Energy	c/kWh	Charge applied to energy consumed between 13:00 and 20:00 on business days.
TOU (closed to new entrants)	Shoulder Energy	c/kWh	Charge applied to energy consumed between 07:00 to 13:00 and 20:00 to 22:00 on business days
	Off Peak Energy	c/kWh	Charge applied to energy consumed at all other times.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
General Supply Block Tariff	Energy Block 1	c/kWh	Charge applied to energy consumption up to and including 120 MWh per annum.
	Energy Block 2	c/kWh	Charge applied to energy consumption above 120 MWh per annum.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
General	Energy	c/kWh	Charge applied to all energy consumption.
Supply Transitional Demand	High-season Demand	\$/kW/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  High-season includes the months November to March inclusive.



Tariff type	Components	Measurement	Charging parameter <sup>5_6</sup>
	Low-season	\$/kW/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.
	Demand	ψ/κνν/ποπατ	Low-season includes the months April to October inclusive.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
	Energy	c/kWh	Charge applied to all energy consumption.
General	High-season	0/1/4/	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.
Supply Demand	Demand	\$/kW/month	High-season includes the months November to March inclusive.
	Low-season		Charge applied to maximum energy demand between 16:00 to 20:00 on business days.
	Demand \$/kV	\$/kW/month	Low-season includes the months April to October inclusive.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
	High-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.
General		C/KVVII	High-season includes the months November to March inclusive.
Supply STOU	Low-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.
		G.K.VVI	Low-season includes the months April to October inclusive.
	Off Peak Energy	c/kWh	Charge applied to energy consumed at all other times.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
Obsolete General	Peak Energy	c/kWh	Charge applied to energy consumed between 13:00 and 20:00 on business days.
Supply TOU (closed to new entrants)	Shoulder Energy	c/kWh	Charge applied to energy consumed between 07:00 to 13:00 and 20:00 to 22:00 on business days
	Off Peak Energy	c/kWh	Charge applied to energy consumed at all other times.
Controlled Load 1	Fixed	c/day	Access charge reflecting a fixed amount per day.



Tariff type	Components	Measurement	Charging parameter <sup>5</sup> _6
	Energy	c/kWh	Charge applied to controlled energy consumption where energy consumption is controlled by our equipment so that supply may not be available between 07:00 and 22:00.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
Controlled Load 2	Energy	c/kWh	Charge applied to controlled energy consumption where supply is available for restricted periods not exceeding a total of 17 hours in any period of 24 hours.



#### 3.2.2 Large low voltage tariff class

The charging parameters for the proposed tariffs for our low voltage customers in this tariff class are set out in the table below.

Table 5 - Charging parameters for the large low voltage tariff class

Tariff Type	Components	Measurement	Charging Parameter <sup>7</sup>
	Fixed	c/day	Access charge reflecting a fixed amount per day.
	High-season Peak	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.
	Energy		High-season includes the months November to March inclusive.
	Low-season Peak	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.
LV Demand	Energy	C/RVVII	Low-season includes the months April to October inclusive.
	Off Peak Energy	c/kWh	Charge applied to all energy consumed at all other times.
	High-season Demand	\$/kVA/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.
			High-season includes the months November to March inclusive.
	Low-season Demand	\$/kVA/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.
			Low-season includes the months April to October inclusive.
	Fixed	c/day	Access charge reflecting a fixed amount per day.
	High-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.
LV Energy			High-season includes the months November to March inclusive.
Transition Tariff	Low-season Peak	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.
	Energy		Low-season includes the months April to October inclusive.
	Off Peak Energy	c/kWh	Charge applied to energy consumed at all other times.

<sup>&</sup>lt;sup>7</sup> Endeavour Energy has displayed demand tariffs in \$/kW or kVA/month terms as this is compatible with our current billing system. Endeavour Energy is currently in the process of changing our billing system with the transition expected early in this TSS period. It is possible, but unconfirmed at the time of writing, that under the new billing system demand prices may need to be expressed on a cents/kW or kVA/day basis. While the way the price is expressed may need to change, the demand price will still apply to the customer's maximum monthly demand.



#### 3.2.3 High voltage demand tariff class

The charging parameters for the proposed tariffs for our high voltage demand customers are set out in the table below.

Table 6 - Charging parameters for the high voltage demand tariff class

Tariff type	Components	Measurement	Charging parameter <sup>®</sup>
	Fixed	c/day	Access charge reflecting a fixed amount per day.
	High-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.  High-season includes the months November to March inclusive.
	Low-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.  Low-season includes the months April to October inclusive.
HV Demand	Off Peak Energy	c/kWh	Charge applied to energy consumed at all other times.
	High-season Demand	\$/kVA/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  High-season includes the months November to March inclusive.
	Low-season Demand	\$/kVA/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  Low-season includes the months April to October inclusive.
Individually Calculated HV Demand HV Demand			

<sup>&</sup>lt;sup>8</sup> Endeavour Energy has displayed demand tariffs in \$/kW or kVA/month terms as this is compatible with our current billing system. Endeavour Energy is currently in the process of changing our billing system with the transition expected early in this TSS period. It is possible, but unconfirmed at the time of writing, that under the new billing system demand prices may need to be expressed on a cents/kW or kVA/day basis. While the way the price is expressed may need to change, the demand price will still apply to the customer's maximum monthly demand.



#### 3.2.4 Subtransmission voltage demand tariff class

The charging parameters for the proposed tariffs for our subtransmission voltage are set out in the table below.

Table 7 - Charging parameters for the subtransmission voltage demand tariff class

Tariff type	Components	Measurement	Charging parameter <sup>₽</sup>
	Fixed	c/day	Access charge reflecting a fixed amount per day.
	High-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.  High-season includes the months November to March inclusive.
	Low-season Peak Energy	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.  Low-season includes the months April to October inclusive.
ST Demand	Off Peak Energy	c/kWh	Charge applied to energy consumed at all other times.
	High-season Demand	\$/kVA/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  High-season includes the months November to March inclusive.
	Low-season Demand	\$/kVA/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.  Low-season includes the months April to October inclusive.
Individually Calculated ST Demand	As per the ST Demand tariff		

<sup>&</sup>lt;sup>9</sup> Endeavour Energy has displayed demand tariffs in \$/kW or kVA/month terms as this is compatible with our current billing system. Endeavour Energy is currently in the process of changing our billing system with the transition expected early in this TSS period. It is possible, but unconfirmed at the time of writing, that under the new billing system demand prices may need to be expressed on a cents/kW or kVA/day basis. While the way the price is expressed may need to change, the demand price will still apply to the customer's maximum monthly demand.



#### 3.2.5 Inter-distributor transfer tariff class

The charging parameters for the proposed tariffs for our inter-distributor transfer customers are set out in the table below.

Table 8 - Charging parameters for the inter-distributer transfer tariff class

Tariff type	Components	Measurement	Charging parameter 10
	Fixed	c/day	Access charge reflecting a fixed amount per day.
	High-season Peak Energy c/kWh		Charge applied to energy consumed between 16:00 to 20:00 on business days.
		C/KVVN	High-season includes the months November to March inclusive.
	Low-season Peak	c/kWh	Charge applied to energy consumed between 16:00 to 20:00 on business days.
Individually	Energy		Low-season includes the months April to October inclusive.
Calculated Demand	Off Peak Energy	c/kWh	Charge applied to energy consumed at all other times.
	High-season \$/kVA/	\$/kVA/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.
			High-season includes the months November to March inclusive.
	Low-season Demand \$/k	\$/kVA/month	Charge applied to maximum energy demand between 16:00 to 20:00 on business days.
			Low-season includes the months April to October inclusive.

<sup>10</sup> Endeavour Energy has displayed demand tariffs in \$/kW or kVA/month terms as this is compatible with our current billing system. Endeavour Energy is currently in the process of changing our billing system with the transition expected early in this TSS period. It is possible, but unconfirmed at the time of writing, that under the new billing system demand prices may need to be expressed on a cents/kW or kVA/day basis. While the way the price is expressed may need to change, the demand price will still apply to the customer's maximum monthly demand.



25

#### 3.2.6 Unmetered supply tariff class

The charging parameters for the proposed tariffs for our unmetered supply customers are set out in the table below.

Table 9 - Charging parameters for the unmetered supply tariff class

Tariff type	Components	Measurement	Charging parameter
Unmetered Energy Tariff	Energy	c/kWh	Charge applied to all energy consumption.



# Approach to setting tariffs

CHAPTER 4



This section details Endeavour Energy's approach to setting tariffs for direct control services<sup>11</sup>. We have set these tariffs by:

- setting the tariff at a level such that the revenue we expect to recover from customers lies between:
  - the stand alone cost of serving those customers who belong to that tariff class; and
  - the avoidable cost of not serving those customers;
- setting each tariff so that it is based on the long run marginal cost (LRMC) of providing services to those customers assigned to that tariff;
- setting our tariffs to reflect the efficient costs of providing the services; and
- taking account of, and limiting the customer impact of changes to tariffs.

For more information on our approach to setting tariffs, see the associated TSES.

#### 4.1 Tariff Setting Methodology

Endeavour Energy sets price levels in two steps. First, costs are allocated to individual tariffs and, second, the structure of charges within each individual tariff is determined.

We allocate costs to individual tariffs by:

- allocating every tariff the LRMC of the distribution network, consistent with clause 6.18.5(f) of the Rules; then
- allocating the residual costs to each tariff by taking into account the previous years' allocation of residual costs and a targeted residual cost allocation where costs are allocated based on:
  - Shared network asset costs for individually calculated, site specific tariffs; and
  - Diversified contribution to peak period demand for 'postage stamp' tariffs

In our view, this approach appropriately takes into consideration the impact on retail customers of changes in tariffs from the previous regulatory year consistent with clause 6.18.5(h) of the Rules.

The costs allocated to each tariff are then converted to a charging structure, which may include a fixed charge, consumption charge and/or demand charge. The structure of charges within each tariff are determined on the following basis:

- For demand tariffs and seasonal TOU tariffs, we propose to signal to customers the LRMC of
  providing network services at times of greatest utilisation using the demand charging parameter
  in demand tariffs and the peak energy charge in seasonal TOU tariffs. The demand/peak
  consumption charge was selected because it provides a signal to customers that more closely
  reflects the driver of network costs (i.e. peak demand).
- Costs not recovered from demand charges or peak energy charges are recovered from either fixed charges or consumption charges (kWh charges). In the absence of reliable information on the price elasticity of demand, this allocation is guided by a rebalancing of the recovery of costs towards fixed charges and away from distortionary consumption-based charges, subject to the extent this rebalancing can be achieved without unacceptable network bill impacts for our customers.

The extent to which we can move towards LRMC-based charging and higher fixed charges is constrained by prioritising the management of customer bill impacts.



<sup>&</sup>lt;sup>11</sup> Clause 6.18.1A(a)(5) of the Rules.

#### 4.1.1 Tariff relativity constraints in the small low voltage tariff class

When setting the pricing relativity between the flat/block tariff, transitional demand tariff, demand tariff and seasonal TOU tariffs, the AER has determined that Endeavour Energy comply with the following constraints:

- annual prices will be set so that no less than 90% of small low voltage tariff class customers can find lower network charges by opting-out of the flat/block tariff to at least one of the transitional demand, demand or seasonal TOU tariffs; and
- annual prices will be set so that no less than 50% of small low voltage tariff class customers will
  have lower network charges by opting-out of the transitional demand tariff to the demand tariff.

Should these constraints result in tariff outcomes that conflict with the requirements of the National Electricity Rules then the requirements of the Rules will take primacy.



## 4.2 Revenue is between stand-alone and avoidable cost for each tariff class

Endeavour Energy sets its tariffs at a level such that, for each tariff class, the revenue we expect to recover from customers lies between:

- the stand alone cost of serving those customers who belong to that tariff class (the upper bound); and
- the avoidable cost of not serving those customers.

The stand-alone cost of serving a group of customers is the total cost required to serve those customers alone, i.e., were we to build the network anew, removing all other customers from the network.

The avoidable cost of serving a group of customers is the reduction in cost that could be achieved if those customers were no longer served, i.e., the reduction in cost associated with a reduction in output that was previously provided to that class of customer.

Endeavour Energy calculates stand-alone and avoidable costs by first classifying each of our network cost categories on the basis of the following two dimensions:

- whether costs are direct or indirect; and
- whether costs are scalable or non-scalable.

Avoidable cost for each tariff class is calculated as the sum of all direct costs multiplied by some weight, 12 which represents the proportion of direct costs that are attributable to that tariff class.

Stand-alone cost for each tariff class is calculated by taking the avoidable cost for that tariff class and adding to it:

- all non-scalable indirect costs we incur in operating the network; and
- a proportion of our scalable, indirect costs that can be attributed to that tariff class.

See Appendix 5 of the explanatory statement that accompanies this TSS for more information on how we have calculated stand-alone and avoidable costs.



<sup>&</sup>lt;sup>12</sup> Endeavour Energy's current weights are derived from the estimated value of the assets at each voltage level.

#### 4.3 Estimating long-run marginal cost

We set our tariffs based on the long run marginal cost (LRMC) of providing services to those customers assigned to that tariff. The LRMC of supplying each tariff class is estimated using an average incremental cost approach, i.e., by taking the average change in projected operating and capital expenditure attributable to future increases in demand. This averages the total cost of supplying new growth in demand over that growth in demand.

In practice, under this approach LRMC is estimated by:

- projecting future operating and capital costs attributable to expected increases in demand;
- forecasting future load growth for the relevant network asset (or assets); and
- dividing the present value of projected costs by the present value of expected increases in demand.

The average incremental cost approach yields an LRMC estimate for each network service expressed in dollars per kW per annum. However, many customers are not, and indeed cannot, be charged on the basis of their contribution to the network's maximum demand. It is therefore necessary to express these 'dollars per kW per annum' LRMC estimates (hereafter termed 'base LRMC estimates') in terms of the charging parameters that constitute each tariff.

#### 4.3.1 Translation of LRMC into charging parameters for non-TOU tariffs

Translation of LRMC into charging parameters for non-TOU tariffs involves two steps, i.e.:

- 1. Converting the base LRMC estimate using the power factor for a given customer class.
- 2. Converting the resulting estimate to dollars per kWh by dividing by the number of hours in the year that the variable tariff component can be charged, i.e.:

LRMC estimate (\$ per kWh) = 
$$\frac{LRMC ($ per kW per year)}{Hours per year}$$

## 4.3.2 Translation of LRMC into charging parameters for time of use energy tariffs

Translation of LRMC into charging parameters for TOU tariffs involves two steps, i.e.:

- 1. Converting the base LRMC estimate using the power factor for a given customer class.
- 2. Converting the resulting estimate to dollars per kWh by dividing by the number of hours in the year that the variable tariff component can be charged, i.e.:

$$Peak \ energy \ price \ high \ season = \frac{LRMC \times P(MD) \times (1-\beta^h) \times (1-\alpha)}{number \ of \ high \ season \ peak \ hours}$$

$$\textit{Peak energy price low season} = \frac{\textit{LRMC} \times \textit{P(MD)} \times (1 - \beta^l) \times (1 - \alpha)}{\textit{number of low season peak hours}}$$

Where:

P(MD) is the probability of maximum demand occurring in the peak period;

 $(1-\beta^h)$  is the per cent allocated to the high-season, and sums to one when added to  $(1-\beta^l)$ ;

 $(1 - \beta^l)$  is the per cent allocated to the low-season; and



 $\alpha$  applies only to large business customers and is the per cent of LRMC recovered from the demand charge, as compared with the peak energy charge, and ensures the combined peak energy and demand price signal is appropriately reflects estimated LRMC.

#### 4.3.3 Translation of LRMC into charging parameters for demand tariffs

Translation of LRMC into charging parameters for demand tariffs involves two steps, i.e.:

- 1. Converting the base LRMC estimate using the power factor for a given customer class (if required).
- 2. Converting the resulting estimate to dollars per kW or kVA by dividing by the number of months in the year that the variable tariff component can be charged, i.e.:

$$\textit{Demand price high season} = \frac{\textit{LRMC} \times \textit{DF} \times \textit{P(MD)} \times (1 - \beta^h) \times \alpha}{\textit{Number of high season months}}$$

Demand price low season = 
$$\frac{LRMC \times DF \times P(MD) \times (1 - \beta^{l}) \times \alpha}{Number\ of\ low\ season\ months}$$

#### Where:

*DF* is the per cent diversity factor for the applicable tariff, and ensures the price signal reflects diversity in the timing of each customer's peak demand and their behavioural contribution to maximum demand;

P(MD) is the probability of maximum demand occurring in the peak period:

 $(1-\beta^h)$  is the per cent allocated to the high-season, and sums to one when added to  $(1-\beta^l)$ ;

 $(1 - \beta^l)$  is the per cent allocated to the low-season; and

 $\alpha$  applies only to large business customers and is the per cent of LRMC recovered from the demand charge, as compared with the peak energy charge, and ensures the combined peak energy and demand price signal is appropriate.

See Appendix 6 of the explanatory statement that accompanies this TSS for more information on how we have calculated LRMC.





## 4.4 Tariffs reflect the efficient costs of providing the services

Endeavour Energy's approach to setting demand charging parameter of tariffs is to set prices that are cost reflective, i.e.:

- prices should be lower when there is more excess capacity, because increased demand will not lead to additional investment, i.e., the cost of additional demand is low; and
- prices should be higher when increased demand for electricity may require additional investment, i.e., the cost of greater demand is high.

By setting our demand charging window to reflect those times of the day that additional demand may require network augmentation, Endeavour Energy is more accurately signalling to consumers those times where the cost of greater demand is high.

See section 7.3 of the explanatory statement that accompanies this TSS for more information on how we have determined the charging windows in a manner that reflects the efficient costs of providing the service





#### 4.5 Tariffs mitigate impact on customers

Endeavour Energy's approach is to ensure that any changes to tariffs are made gradually, to limit the impact on customers each year.

The transition from energy to demand based tariffs for our residential and small business affect some customers network bills. To mitigate the impact on customers Endeavour Energy proposes:

- a ten year transition period for the demand tariff parameter of the transitional demand tariff; and
- to provide customers on the transitional demand tariff with an opt-out option should they wish to return to the energy based tariff

The expected network bill impacts of our proposed tariffs are Appendix 10 of the TSES.





## Glossary

Appendix 1





Term	Definition
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AIC	Average incremental cost
ASP	Accredited service provider
DBT	Declining block tariff
DNSP	Distribution network service provider
EWON	Energy and Water Ombudsman NSW
GWh	Gigawatt hour
HV	High voltage
IBT	Inclining block tariff
kV	Kilovolt
kVA	Kilovolt-ampere
kW	Kilowatt
kWh	Kilowatt hour
LRMC	Long run marginal cost
LV	Low voltage
NEM	National Electricity Market
NER or the Rules	National Electricity Rules
NUOS	Network Use of System
MVA	Megavolt-ampere
MW	Megawatt
MWh	Megawatt hour
PTR	Peak time rebate
SBS	NSW Solar Bonus Scheme
ST	Subtransmission voltage
TOU	Time of use
TSES	Tariff structure explanatory statement
TSS	Tariff structure statement



# Compliance checklist

Appendix 2





This section sets out the TSS Rule requirements and the section in which those requirements have been met within this the Tariff Structure Explanatory Statement accompanying this TSS.

Rule Provision	Amending Clause	Requirement	Relevant section
Part E: Regu	latory propos	sal and proposed tariff structure statement	
6.8.2		Submission of tariff structure statement	
6.8.2(a)	11.73.2(a)	A Distribution Network Service Provider must, whenever required to do so under paragraph (b), submit to the AER a regulatory proposal and a proposed tariff structure statement related to the distribution services provided by means of, or in connection with, the Distribution Network Service Provider's distribution system.	Noted
6.8.2(b)	11.73.2(a)	A regulatory proposal and a proposed tariff structure statement must be submitted: by 27 November 2015	Noted
6.8.2(c)	11.73.2(a)	A proposed <i>tariff structure statement</i> must be accompanied by information that contains a description (with supporting materials) of how the proposed <i>tariff structure statement</i> complies with the <i>pricing principles for direct control services</i> .	Chapter 7
6.8.2(c1a)	11.73.2(a)	The proposed tariff structure statement must be accompanied by an overview paper which includes a description of how the Distribution Network Service Provider has engaged with retail customers and retailers in developing the proposed tariff structure statement and has sought to address any relevant concerns identified as a result of that engagement	Not applicable to revised proposal
6.8.2(d1)		The tariff structure statement must be accompanied by an indicative pricing schedule.	Appendix 9
6.8.2(d2)		The tariff structure statement must comply with the pricing principles for direct control services.	Chapter 7
6.8.2(e)		If more than one distribution system is owned, controlled or operated by a Distribution Network Service Provider, then, unless the AER otherwise determines, a separate tariff structure statement are to be submitted for each distribution system.	Not applicable



Rule Provision	Amending Clause	Requirement	Relevant section
6.8.2(f)		If, at the commencement of this Chapter, different parts of the same distribution <i>system</i> were separately regulated, then, unless the <i>AER</i> otherwise determines, a separate <i>tariff structure statement</i> are to be submitted for each part as if it were a separate <i>distribution system</i> .	Not applicable
Part I: Distri	bution Pricing	g Rules	
6.18.1A		Tariff Structure Statement	
6.18.1A(a)( 1)		The tariff structure statement must include the tariff classes into which retail customers for direct control services will be divided during the relevant regulatory control period.	Section 6.1.1
6.18.1A(a)( 2)		The tariff structure statement must include the policies and procedures the Distribution Network Service Provider will apply for assigning retail customers to tariffs or reassigning retail customers from one tariff to another (including any applicable restrictions).	Appendix 2 Chapter 6
6.18.1A(a)( 3)		The tariff structure statement must include the structures for each proposed tariff.	Appendix 3 and 4
6.18.1A(a)( 4)		The tariff structure statement must include the charging parameters for each proposed tariff.	Appendix 3
6.18.1A(a)( 5)		The tariff structure statement must include a description of the approach that the <i>Distribution Network Service</i> Provider will take in setting each tariff in each pricing proposal during the relevant regulatory control period in accordance with clause 6.18.5 (pricing principles).	Chapter 7, Appendix 5, 6, 7, 8 and 10
6.18.1A(b)		The tariff structure statement must comply with the pricing principles for direct control services.	Chapter 7
6.18.1A(e)		A tariff structure statement must be accompanied by an indicative pricing schedule which sets out, for each tariff for each regulatory year of the regulatory control period, the indicative price levels determined in accordance with the tariff structure statement.	Appendix 9



Rule Provision	Amending Clause	Requirement	Relevant section
6.18.3		Tariff Classes	
6.18.3(b)		Each customer for <i>direct control services</i> must be a member of 1 or more <i>tariff classes</i> .	Section 6.1.1 and 6.1.2
6.18.3(c)		Separate tariff classes must be constituted for retail customers to whom standard control services are supplied and retail customers to whom alternative control services are supplied (but a customer for both standard control services and alternative control services may be a member of 2 or more tariff classes).	Section 6.1.1 and 6.1.2
6.18.3(d)		A tariff class must be constituted with regard to:  1. the need to group retail customers together on an economically efficient basis; and  2. the need to avoid unnecessary transaction costs.	Section 6.1.1
6.18.4		Principles governing assignment or re-assignment of retail customers to tariff classes and assessment and review of basis of charging	
6.18.4(a)		In formulating provisions of a distribution determination governing the assignment of <i>retail customers</i> to <i>tariff classes</i> or the re-assignment of <i>retail customers</i> from one <i>tariff class</i> to another, the AER must have regard to the following principles:	Noted
6.18.4(a)(1)		retail customers should be assigned to tariff classes on the basis of one or more of the following factors: the nature and extent of their usage; the nature of their connection to the network; whether remotely-read interval metering or other similar metering technology has been installed at the retail customer's premises as a result of a regulatory obligation or requirement;	Section 6.1.1 and 6.1.2
6.18.4(a)(2)		retail customers with a similar connection and usage profile should be treated on an equal basis;	Section 6.1.1 and 6.1.2
6.18.4(a)(3)		however, retail customers with micro-generation facilities should be treated no less favourably than retail customers without such facilities but with a similar load profile;	Section 6.1.1



Rule Provision	Amending Clause	Requirement	Relevant section
6.18.4(a)(4)		a Distribution Network Service Provider's decision to assign a customer to a particular tariff class, or to reassign a customer from one tariff class to another should be subject to an effective system of assessment and review.  Note: If (for example) a customer is assigned (or reassigned) to a tariff class on the basis of the customer's actual or assumed maximum demand, the system of assessment and review should allow for the reassignment of a customer who demonstrates a reduction or increase in maximum demand to a tariff class that is more appropriate to the customer's load profile.	Section 6.1.1 and 6.1.2. Appendix 2
6.18.4(b)		If the charging parameters for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.	Appendix 2
	overning ass	work Pricing Principles signment or re-assignment of retail customers to tariff clas of basis of charging	ses and
		Network Pricing Objective	
6.18.5(a)		The network pricing objective is that the tariffs that a Distribution Network Service Provider charges in respect of its provision of direct control services to a retail customer should reflect the Distribution Network Service Provider's efficient costs of providing those services to the retail customer.	Chapter 6 and 7
		Application of the Pricing Principles	
6.18.5(b)		Subject to paragraph (c), a <i>DNSP's</i> tariffs must comply with the pricing principles set out in paragraphs (e) to (j).	Chapter 7
6.18.5(c)		A Distribution Network Service Provider's tariffs may vary from tariffs which would result from complying with the pricing principles set out in paragraphs (e) to (g) only: to the extent permitted under paragraph (h); and to the extent necessary to give effect to the pricing principles set out in paragraphs (i) to (j).	Chapter 7 and Appendix 9
6.18.5(d)		A <i>Distribution Network Service Provider</i> must comply with paragraph (b) in a manner that will contribute to the achievement of the <i>network pricing objective</i> .	Chapter 7
		Pricing Principles	



Rule Provision	Amending Clause	Requirement	Relevant section
6.18.5(e)		For each tariff class, the revenue expected to be recovered nust lie on or between:  1. an upper bound representing the stand alone cost of serving the retail customers who belong to that class; and  2. a lower bound representing the avoidable cost of not serving those retail customers.	Section 7.4 and Appendix 5
6.18.5(f)	p a a	Each tariff must be based on the <i>long run marginal cost</i> of providing the service to which it relates to the retail customers assigned to that tariff with the method of calculating such cost and the manner in which that method is applied to be determined having regard to:  1. the costs and benefits associated with calculating, implementing and applying that method as proposed;  2. the additional costs likely to be associated with meeting demand from retail customers that are assigned to that tariff at times of greatest utilisation of the relevant part of the distribution network; and  3. the location of retail customers that are assigned to that tariff and the extent to which costs vary between different locations in the distribution network.	Section 7.5 and Appendix 6
6.18.5(g)	T	<ol> <li>reflect the Distribution Network Service Provider's total efficient costs of serving the retail customers that are assigned to that tariff;</li> <li>when summed with the revenue expected to be received from all other tariffs, permit the Distribution Network Service Provider to recover the expected revenue for the relevant services in accordance with the applicable distribution determination for the Distribution Network Service Provider; and</li> <li>comply with sub-paragraphs (1) and (2) in a way that minimises distortions to the price signals for efficient usage that would result from tariffs that comply with the pricing principle set out in paragraph (f).</li> </ol>	Section 7.2 and 7.6 Appendix 7 and 8



Rule Provision	Amending Clause	Requirement	Relevant section
6.18.5(h)		A Distribution Network Service Provider must consider the impact on retail customers of changes in tariffs from the previous regulatory year and may vary tariffs from those that comply with paragraphs (e) to (g) to the extent the Distribution Network Service Provider considers reasonably necessary having regard to:  1. the desirability for tariffs to comply with the pricing principles referred to in paragraphs (f) and (g), albeit after a reasonable period of transition (which may extend over more than one regulatory control period);  2. the extent to which retail customers can choose the tariff to which they are assigned; and  3. the extent to which retail customers are able to mitigate the impact of changes in tariffs through their usage decisions.	Section 7.7 and Appendix 10
6.18.5(i)		The structure of each tariff must be reasonably capable of being understood by retail customers that are assigned to that tariff, having regard to:  1. the type and nature of those retail customers; and 2. the information provided to, and the consultation undertaken with, those retail customers.	Chapter 5
6.18.5(j)		A tariff must comply with the Rules and all applicable regulatory instruments.	Noted





# Indicative pricing schedule

Appendix 3





The tables below set out the indicative prices for our standard control services for the regulatory period.

During the TSS period, Endeavour Energy may need to introduce new tariff codes for billing purposes. Any new tariff codes introduced will comply with the tariff structures outlined in this Tariff Structure Statement and the price level for NUOS services will equate to the tariff type under which the new tariff code has been created. Some tariffs codes include generated energy (credit) rate components in addition to the charging parameters.

Indicative prices for alternative control services are provided as attachments to our Revised Regulatory Proposal:

- Metering Attachment 0.18;
- Public Lighting Attachment 0.16; and
- Ancillary Network Services Attachment 0.17.

Our proposed charges for our security lights (Nightwatch) services for the 2019-24 period are unchanged from the AER's draft decision.

Table 10 - 2019/2020 Indicative network pricing

	Fixed (\$/day)	Non TOU Energy consumption (c/kWh)		TOU Energy consumption (c/kWh)			Demand (\$/kVA or kW/mth)	
Tariff type	Daily	Anytime/ Step 1	Step 2	High Season Peak / Peak	Low Season Peak / Shoulder	Off Peak	High Season	Low Season
Residential Energy	0.3681	8.6227						
Residential TOU (Obsolete)	0.4047			12.3840	8.1290	7.6710		
Residential Seasonal TOU	0.4047			19.4775	10.8215	7.0705		
Residential Demand	0.4047	5.8119					4.0890	1.2520
Residential Demand (Transitional)	0.4047	7.2815					1.0000	0.3062
General Supply (GS) Energy	0.5268	8.7032	9.6528					
GS TOU (Obsolete)	0.5795			11.9813	7.7263	7.2683		
GS Seasonal TOU	0.5795			20.0229	11.3669	7.6159		
GS Demand	0.5795	6.5980					5.6230	1.7210
GS Demand (Transitional)	0.5795	7.9713					1.0000	0.3061
Controlled Load 1	0.0324	1.4138						
Controlled Load 2	0.0324	3.3512						
LV TOU Demand	20.5400			3.9714	3.3914	2.0024	10.1349	8.6509
LV TOU Demand Transition	20.5400			18.2205	15.3205	8.3735		
HV TOU Demand	35.2900			1.6974	1.6464	1.5264	8.8189	8.6909
ST TOU Demand	55.4800			1.1589	1.1119	0.9999	7.1307	7.0107
Unmetered Energy		8.7032						
Unmetered Street Lighting		7.8399						
Unmetered Traffic Lights		8.7032						
Unmetered Night Watch		6.9047						

Table 11 - 2020/2021 Indicative network pricing

	Fixed (\$/day)	Non TOl consumpti	J Energy on (c/kWh)	TOU Ener	gy consumptio	on (c/kWh)	Demand (\$/kVA or kW/mth)	
Tariff type	Daily	Anytime/ Step 1	Step 2	High Season Peak / Peak	Low Season Peak / Shoulder	Off Peak	High Season	Low Season
Residential Energy	0.3875	8.7484						
Residential TOU (Obsolete)	0.4159			12.8214	8.4600	7.9906		
Residential Seasonal TOU	0.4159			19.9439	11.0715	7.2267		
Residential Demand	0.4159	5.9447					4.1912	1.2833
Residential Demand (Transitional)	0.4159	7.2260					1.4600	0.4470
General Supply (GS) Energy	0.5546	8.8779	9.8942					
GS TOU (Obsolete)	0.5956			12.3230	7.9616	7.4922		
GS Seasonal TOU	0.5956			20.5126	11.6402	7.7954		
GS Demand	0.5956	6.7566					5.7636	1.7640
GS Demand (Transitional)	0.5956	7.9655					1.6700	0.5111
Controlled Load 1	0.0373	1.5120						
Controlled Load 2	0.0373	3.4897						
LV TOU Demand	22.6500			4.1667	3.5722	2.1484	9.7470	8.2259
LV TOU Demand Transition	22.6500			18.7525	15.7800	8.6593		
HV TOU Demand	38.9200			1.7605	1.7082	1.5852	8.8558	8.7246
ST TOU Demand	61.1900			1.2204	1.1722	1.0574	7.1545	7.0315
Unmetered Energy		8.8779						
Unmetered Street Lighting		7.9986						
Unmetered Traffic Lights		8.8779						
Unmetered Night Watch		7.1984						



Table 12 - 2021/2022 Indicative network pricing

	Fixed (\$/day)	Non TOl consumpti		TOU Ener	gy consumption	on (c/kWh)	Demand (\$/kVA or kW/mth)	
Tariff type	Daily	Anytime/ Step 1	Step 2	High Season Peak / Peak	Low Season Peak / Shoulder	Off Peak	High Season	Low Season
Residential Energy	0.4068	8.7043						
Residential TOU (Obsolete)	0.4262			13.1375	8.6671	8.1859		
Residential Seasonal TOU	0.4262			20.2527	11.1585	7.2176		
Residential Demand	0.4262	5.9182					4.2960	1.3154
Residential Demand (Transitional)	0.4262	7.0248					1.9200	0.5879
General Supply (GS) Energy	0.5823	8.8375	9.8411					
GS TOU (Obsolete)	0.6104			12.4949	8.0245	7.5433		
GS Seasonal TOU	0.6104			20.7969	11.7027	7.7618		
GS Demand	0.6104	6.7029					5.9077	1.8081
GS Demand (Transitional)	0.6104	7.7476					2.3400	0.7162
Controlled Load 1	0.0428	1.6290						
Controlled Load 2	0.0428	3.6517						
LV TOU Demand	24.9100			4.2776	3.6682	2.2089	9.3348	7.7757
LV TOU Demand Transition	24.9100			19.1065	16.0597	8.7610		
HV TOU Demand	42.8100			1.7736	1.7200	1.5939	8.9187	8.7842
ST TOU Demand	67.3000			1.2383	1.1889	1.0712	7.1920	7.0659
Unmetered Energy		8.8375						
Unmetered Street Lighting		7.9517						
Unmetered Traffic Lights		8.8375						
Unmetered Night Watch		7.4823						



Table 13 - 2022/2023 Indicative network pricing

	Fixed (\$/day)		J Energy ion (c/kWh)	TOU Ener	gy consumptio	on (c/kWh)	Demand (\$/kVA or kW/mth)		
Tariff type	Daily	Anytime/ Step 1	Step 2	High Season Peak / Peak	Low Season Peak / Shoulder	Off Peak	High Season	Low Season	
Residential Energy	0.4271	8.6271							
Residential TOU (Obsolete)	0.4368			13.4308	8.8486	8.3554			
Residential Seasonal TOU	0.4368			20.5436	11.2220	7.1826			
Residential Demand	0.4368	5.8620					4.4034	1.3483	
Residential Demand (Transitional)	0.4368	6.7892					2.3800	0.7287	
General Supply (GS) Energy	0.6114	8.8514	9.8511						
GS TOU (Obsolete)	0.6256			12.7276	8.1454	7.6522			
GS Seasonal TOU	0.6256			21.1472	11.8257	7.7863			
GS Demand	0.6256	6.7067					6.0554	1.8533	
GS Demand (Transitional)	0.6256	7.5870					3.0100	0.9212	
Controlled Load 1	0.0492	1.7285							
Controlled Load 2	0.0492	3.7657							
LV TOU Demand	27.4000			4.3649	3.7403	2.2445	8.8847	7.2866	
LV TOU Demand Transition	27.4000			19.4430	16.3201	8.8389			
HV TOU Demand	47.0900			1.7704	1.7155	1.5863	8.9805	8.8427	
ST TOU Demand	74.0300			1.2428	1.1922	1.0715	7.2289	7.0997	
Unmetered Energy		8.8514							
Unmetered Street Lighting		7.9549							
Unmetered Traffic Lights		8.8514							
Unmetered Night Watch		7.7771							



Table 14 - 2023/2024 Indicative network pricing

	Fixed (\$/day)		J Energy on (c/kWh)	TOU Ener	gy consumptio	on (c/kWh)	Demand (\$/kVA or kW/mth)		
Tariff type	Daily	Anytime/ Step 1	Step 2	High Season Peak / Peak	Low Season Peak / Shoulder	Off Peak	High Season	Low Season	
Residential Energy	0.4464	8.4509							
Residential TOU (Obsolete)	0.4464			13.7252	9.0285	8.5229			
Residential Seasonal TOU	0.4464			20.7377	11.1831	7.0427			
Residential Demand	0.4464	5.7005					4.5135	1.3820	
Residential Demand (Transitional)	0.4464	6.4494					2.8400	0.8696	
General Supply (GS) Energy	0.6394	8.7777	9.7669						
GS TOU (Obsolete)	0.6394			12.8714	8.1747	7.6692			
GS Seasonal TOU	0.6394			21.4143	11.8596	7.7192			
GS Demand	0.6394	6.6183					6.2067	1.8997	
GS Demand (Transitional)	0.6394	7.3387					3.6800	1.1263	
Controlled Load 1	0.0564	1.8184							
Controlled Load 2	0.0564	3.8549							
LV TOU Demand	30.0500			4.3997	3.7595	2.2263	8.3431	6.7050	
LV TOU Demand Transition	30.0500			19.6595	16.4584	8.7902			
HV TOU Demand	51.6500			1.7237	1.6674	1.5350	9.0024	8.8611	
ST TOU Demand	81.2100			1.2173	1.1654	1.0418	7.2453	7.1128	
Unmetered Energy		8.7777							
Unmetered Street Lighting		7.8841							
Unmetered Traffic Lights		8.7777							
Unmetered Night Watch		8.0497							





## **Publication date**

January 2019

## Produced by

Endeavour Énergy – Network Regulation Branch

## **Head Office**

51 Huntingwood Drive Huntingwood NSW 2148 PO Box 811, Seven Hills NSW 1730

#### Phone

131 081 or (02) 9853 6666 (8.00am – 5.30pm Monday to Friday)

#### Fax

(02) 9853 6000

## **Email**

jon.hocking@endeavourenergy.com.au