

# Final Decision

Endeavour Energy

Electricity Distribution

Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

Attachment 18  
Connection Policy

April 2024

© Commonwealth of Australia 2024

This work is copyright. In addition to any use permitted under the *Copyright Act 1968* all material contained within this work is provided under a Creative Commons Attributions 4.0 Australia licence with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright but which may be part of or contained within this publication.

The details of the relevant licence conditions are available on the Creative Commons website as is the full legal code for the CC BY 4.0 AU licence.

### **Important notice**

The information in this publication is for general guidance only. It does not constitute legal or other professional advice. You should seek legal advice or other professional advice in relation to your particular circumstances.

The AER has made every reasonable effort to provide current and accurate information, but it does not warrant or make any guarantees about the accuracy, currency or completeness of information in this publication.

Parties who wish to re-publish or otherwise use the information in this publication should check the information for currency and accuracy prior to publication.

Inquiries about this publication should be addressed to:

Australian Energy Regulator  
GPO Box 3131  
Canberra ACT 2601  
Email: [aerinquiry@aer.gov.au](mailto:aerinquiry@aer.gov.au)  
Tel: 1300 585 165

AER reference: AER212494

### **Amendment record**

Version	Date	Pages
1	30 April 2024	27

# Connection Policy

Applicable for 2024-2029



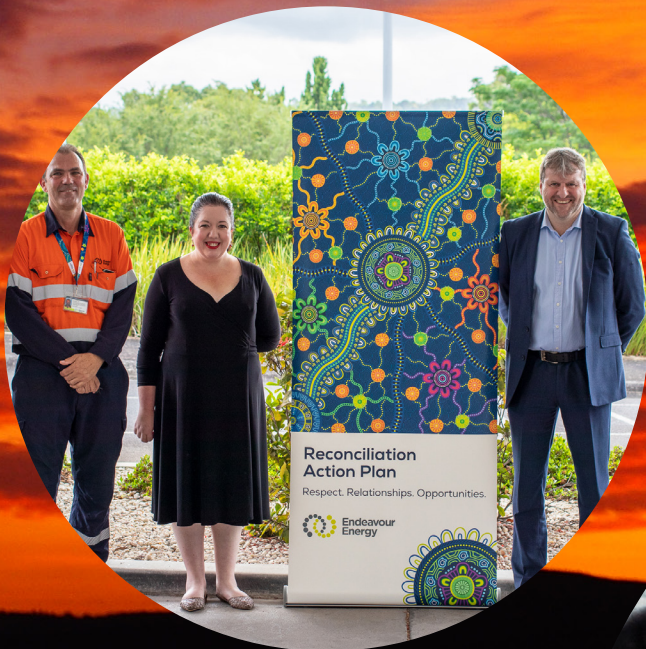


# Contents

1. Introduction	4
2. Connection services provided by Endeavour Energy	7
3. Connection offers	10
4. Contestable services provided by ASPs	14
5. Connection charges	16
6. Distributed energy resource connections	21
Appendix 1: Pioneer scheme	24



Endeavour Energy acknowledges the Traditional Custodians of the lands on which we work — the people of the Dharawal, Dharug, Gundungarra, Wiradjuri and Yuin nations — and recognises their continuing connection to Country, cultures and community. We pay our respect to elders past, present and emerging.





: 1. Introduction



## 1.1 Connection to Endeavour Energy's distribution system

---

A connection service allows premises to be supplied with electricity from the Endeavour Energy's electricity distribution system and to export electricity from their own generating systems. To obtain a new connection to Endeavour Energy's electricity distribution system or an alteration<sup>1</sup> to an existing connection, a customer (also known as a Connection Applicant) must apply to Endeavour Energy for a connection service.

Endeavour Energy provides a range of connection services under Chapter 5A of the National Electricity Rules (NER). There may be charges payable to Endeavour Energy for connection services or for work required to upgrade the shared network including stand-alone power systems (SAPS) for the connection. These services and associated fees are regulated by Australian Energy

Regulator (AER). There may also be charges payable to an Accredited Service Provider (ASP) for contestable services. Endeavour Energy does not provide contestable services.

ASPs provide contestable network services under the Electricity Supply Act 1995 (NSW). A contestable network service is any work to design, construct or install assets that connect a customer's installation to the Endeavour Energy electricity network. If contestable network services are required according to the AER service classification, we will inform you and you must arrange this work to be carried out with an ASP on the list on the NSW Department of Planning and Environment website. Charges for contestable services are paid directly by the customer to the selected ASP.

## 1.2 Purpose and scope

---

The purpose of this Connection Policy is to set out the circumstances in which Endeavour Energy requires a Connection Applicant to pay for the cost of connecting their premises or real estate development to the Endeavour Energy electricity distribution system. Each of the connection services we provide and how the charges are calculated are explained in this Connection Policy. This policy applies to connections to Endeavour Energy's electricity distribution network and regulated SAPS.

Connection applicants to which this Connection Policy applies are listed in the NER as one of the following categories:

- a retail customer (which includes a small customer, a large customer, a micro-embedded generator<sup>2</sup> or a non-registered embedded generator connecting a generating unit to obtain a standard connection service);
- retailer or a person acting on behalf of a retail customer;
- a real estate developer;

- a registered participant or intending participants who is:
  - acting as the agent of a retail customer, or
  - seeking connection or connection services in relation to a regulated SAPS, otherwise known as a SAPS resource provider.<sup>3</sup>
- a non-registered load connecting to Endeavour Energy's distribution network, or a non-registered embedded generator connection to a regulated SAPS); and
- any load connection to a regulated SAPS;

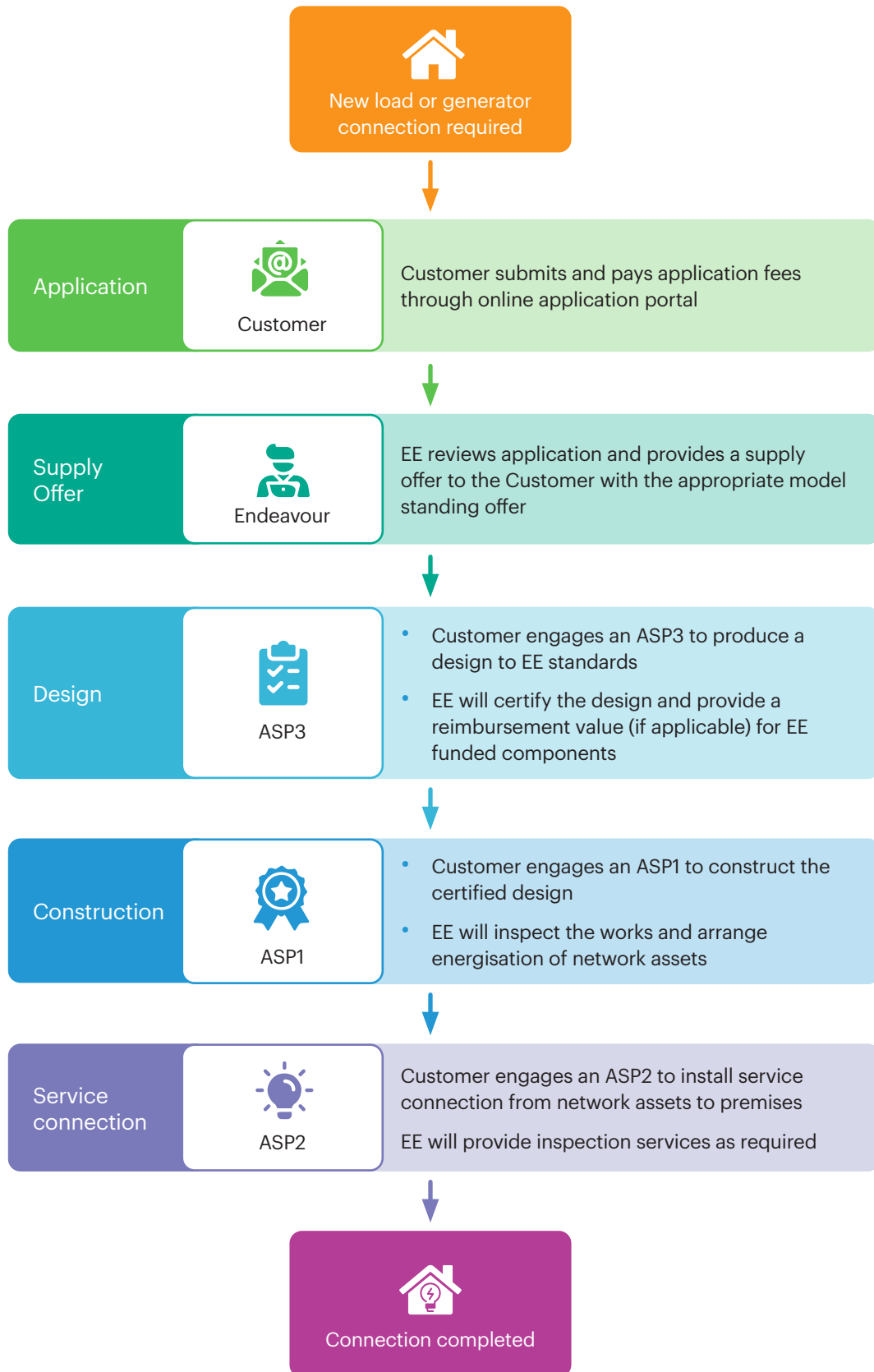
The type of connection service that you apply for will depend on what and where you want to connect. Further information about different types of connection applications is provided in Section 6.

<sup>1</sup> NER Clause 5A.A.1 defines a "connection alteration" as an alteration to an existing connection including an addition upgrade, extension, expansion, augmentation or any other kind of alteration.

<sup>2</sup> A "micro embedded generation connection" is defined in NER Clause 5A.A.1 as a connection of the kind contemplated by Australia Standard AS 4777 (Grid connection of energy systems via inverters). This also includes a Market Small Generation Aggregator on behalf of retail customer connecting a micro embedded generator to a distribution network.

<sup>3</sup> NER Chapter 10 describes a "SAPS resource provider" as a person who supplies electricity from one or more generating units that are connected to a regulated SAPS and is registered with AEMO as a SAPS resource provider.

# High level connection process



: 2. **Connection services  
provided by  
Endeavour Energy**





## 2.1 Applying for a connection service

---

Customers must apply to Endeavour Energy to obtain a new or altered connection service. The connection service offered will depend on the nature of the connection based on the details contained within the application request. The electrical load capacity, export capacity and location requested by the customer are the key factors that determine the appropriate connection service and which charges apply.

- Load means the amount of electrical power delivered at an instance at a connection point or aggregated set of connection points.
- Customer export means supply to a distribution network of electricity generated by a micro embedded generator or non-registered embedded generator.<sup>4</sup> A basic export level is the threshold up to which a customer may export without charge that applies at the customer's location for different connection customers or services. The basic export level may vary over time of day and across years.<sup>5</sup>

- Locations are either urban or rural. Rural, which is also known as non-urban, is that part of a network where the average demand on the high voltage feeders is less than 0.3 megavolt amperes per kilometre, or the location is in an area zoned as rural under a local environmental plan (in the Environmental Planning and Assessment Act 1979), or the location predominantly used for agricultural purposes. Urban network is that part of a network that is not a rural network. If the zoning on your rates notice or development application is residential such as (R1, R2, R3 or R4) then you are in an urban location.

There are two categories of connection services provided by Endeavour Energy: i) Endeavour Energy Provided Connection Works and ii) Ancillary Network Services (ANS).

## 2.2 Endeavour Energy Provided Connection Works

---

Endeavour Energy Provided Connection Works are works to install electrical assets for a connection to our network and where there is a reasonable likelihood at the time of the application that in the foreseeable future those works will benefit Endeavour Energy's management of the shared network or SAPS, beyond the connection point.

There is no charge for Endeavour Energy Provided Connection Works at the time the new connection or connection alteration is made. Instead, we recover our costs for the construction of these connection assets through general distribution charges levied on all customers.

<sup>4</sup> As defined by NER Clause 8.13. NER Chapter 10 defines "embedded generating unit" as a generating unit connected within a distribution system and not having direct access to the transmission network. NER Chapter 10 defines "generating unit" as plant used in the production of electricity and all related equipment essential to its functioning as a single unit. The definition of generating unit is technologically neutral and includes non-traditional generation like battery storage and solar photovoltaics.

<sup>5</sup> AER Export Tariff Guidelines May 2022 p.17, 19











## 2.3 Ancillary Network Services

---

Ancillary Network Services (ANS) are the main connection services we provide to customers for which ANS fees are payable. Fees for ancillary services are regulated by AER and are published on our website.<sup>6</sup> ANS include our

interactions with ASPs to ensure that the contestable network services they provide, meet the design and technical requirements to be connected to and form part of our network.

Some of the ANS for network connections that we provide are:

 <p><b>Connection offer services (Basic and Standard)</b></p>	 <p><b>Design related services</b></p>	 <p><b>Connection application related services</b></p>	 <p><b>Inspection and re-inspection services</b></p>	 <p><b>Access permits, oversight and facilitation</b></p>
 <p><b>Notices of arrangement and completion notices</b></p>	 <p><b>Contestable network commissioning and decommissioning</b></p>	 <p><b>Termination of cable at zone substation – distributor required performance for safety reasons</b></p>	 <p><b>Site establishment services</b></p>	 <p><b>Network safety services</b></p>

Further information about ANS is available on our [website](#).

<sup>6</sup> Endeavour Energy's Network Price List: Ancillary Network Services

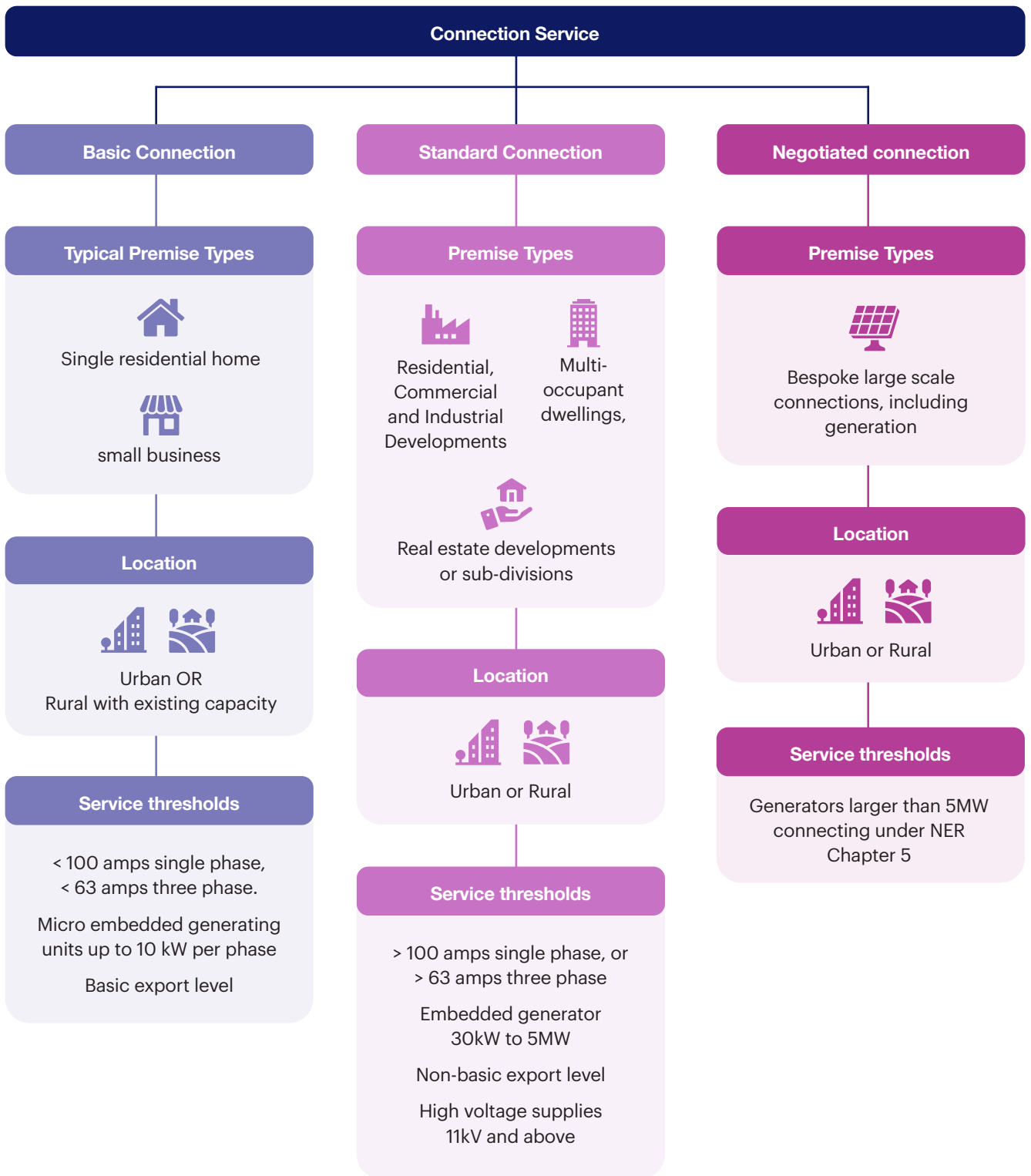


# : 3. Connection offers



# Summary

Figure 1 summarise the different types of customers and connection service offers. A connection offer is an offer to contract with us for the appropriate type of service based on the information provided in a customer’s connection application. Endeavour Energy provides three types of connection offers for basic, standard and negotiated connections.



## 3.1 Basic Connection Offer

---

### Basic Connection Eligibility

Eligibility requirements for a basic connection offer are:

- a load in an urban area of less than 100 amps single phase (or 63 amps three phase). Endeavour Energy will fund any necessary augmentation to connect customers in urban areas under this threshold;
- a load in a rural area that has existing capacity with no need for augmentation of Endeavour Energy's network or system; or
- micro embedded generation up to 10kW per phase (or 30kW three phase), connected via a compliant inverter.<sup>7</sup>

A micro embedded generator basic connection allows a customer to export electricity generated on their side of the meter to the distribution network or SAPS. Endeavour Energy will apply static limits or dynamic export envelopes as described in Section 6.

### Typical Customer Premises

Basic connection offers are typically made to single residential premises, small commercial premises and small multi-occupant developments, other than a real estate developer or a non-registered embedded generator. In rare cases Endeavour Energy may fund minimal network extensions or augmentation works to facilitate the connection.<sup>8</sup> Loads in non-urban locations or loads above 100 amps single phase (or 63 amps three phase), may receive a low voltage (LV) basic connection offer if the connection can be supported by the network, without extension or augmentation.

<sup>7</sup> NER Chapter 10 defines "micro embedded generation connection" as a connection between an embedded generating unit and a distribution network of the kind contemplated by Australian Standard AS 4777 (Grid connection of energy systems via inverters). Further details about connection of micro embedded generation are available on our website.

<sup>8</sup> NER Chapter 10 defines "extension" is an augmentation that requires the connection of a power line or facility outside the present boundaries of the distribution network owned, controlled or operated by a Network Service Provider.

## 3.2 Standard Connection Offer

---

### Standard Connection Eligibility

Eligibility requirements for a standard connection offer are:

- a load in an urban area with maximum capacity greater than 100 amps single phase (or 63 amps three phase);
- a load in a rural area that does not have existing network capacity and has a need for augmentation of Endeavour Energy's network. The augmentation is funded by the customer;
- larger LV loads which are assessed as needing extension or augmentation;
- embedded generation, connected via compliant inverters that:
  - have a total inverter capacity less than 5 MW; or
  - are exempt by the Australian Energy Market Operator (AEMO) from the requirement to register as a generator.<sup>9</sup>

The export capacity offered will depend on the capacity of the network or system, the availability of a technical and economic feasible solution, the load and export amount that you specify in your application and conditions of relevant trial arrangements. Applications are individually assessed by Endeavour Energy as the

operation of generators may affect other customers connected to our network. Endeavour Energy will apply a static export limit or a dynamic operating envelope as described in Section 6.

A standard connection offer fee applies for this service.

### Typical Customer Premises

Standard connection offers are typically made to large multi-occupant developments, large commercial and industrial developments and rural customers requiring network extension or augmentation.

Charges that may apply, depending on the circumstances of the application, are for:

- contestable network services associated with their premises connection provided by ASPs;
- ANS associated with connection of their premises;
- network connection works that are dedicated to their premises;
- a guarantee of revenue, which may include property tenure, warranty maintenance or a guarantee of revenue to Endeavour Energy; and
- a contribution to a pioneer scheme.

Customers must provide a location for the connection assets on their site or a third party's site.

## 3.3 Negotiated Connection Offer

---

Eligibility requirements for a negotiated connection offer are:

- for connection services that are neither a basic connection service nor a standard connection service, such as an embedded generator with a capacity of between 5MW and 30MW for which the negotiated connection service will be largely based on a standard connection service; or

- for a basic connection service or a standard connection service and the customer elects to negotiate the terms and conditions on which the connection service is to be provided.

These customers may also be required to pay a negotiation fee to cover the expenses reasonably incurred by Endeavour Energy in assessing the customer's application and preparing a negotiated connection offer.

<sup>9</sup> Exemption is allowed in NER Clause 2.2.1(c) if it is consistent with AEMO's latest 'Guide to Generator Exemptions and Classification of Generator Units' or equivalent. The standing exemption is for generating systems with a total nameplate rating of less than 5MW and is unlikely to cause a material degradation in the quality of supply to other network users. Exempt generators may register as Small Generation Aggregator or as a SAPS resource provider.



# 4. Contestable services provided by ASPs



Endeavour Energy's response to a connection application may state that there is insufficient infrastructure to meet their connection requirements, requiring the applicant to engage an ASP to design and construct the connection assets. These are contestable services and are not provided by Endeavour Energy. ASPs must:

- be accredited by the NSW Government under Part 3 of the Electricity Supply (Safety and Network Management) Regulation 2014;
- be appropriately authorised by Endeavour Energy when working on or near the existing network. See our website for ASPs authorised to work on our electricity distribution system;
- construct the connection assets in accordance with Endeavour Energy's design, construction and installation standards;
- comply with the Service and Installation Rules of NSW. (Customers must also comply with these rules); and
- employ or sub-contract suitably qualified, experienced and authorised personnel.

### There are three levels of ASPs:

- Level 1 – Network Constructor
- Level 2 – Service Mains Constructor
- Level 3 – Designer

Customers must choose and engage the correct level of ASP required to address the infrastructure shortfall and ensure that they deliver the contestable services. Customers are liable to the ASP directly for their charges in carrying out contestable services. Charges for contestable services are not specified in this Connection Policy and it is customers responsibility to be aware of all the likely costs that are associated with the services.

### The list below provides some examples of contestable services that ASPs may charge for:

- Environmental Impact Assessment preparation charge
- Design quotation
- Re-design quotation
- Construction quotation
- Connection quotation (to connect a customer to the distribution network)
- Project definition cost
- Work outside the normal working hours (6:00am to 6:00pm)
- Switching fees
- Hiring and connection of generators

Upon completion of the work, the network or system assets are owned by Endeavour Energy and we take responsibility to maintain them going forward.



# : 5. Connection charges





## 5.1 Basis of charges

---

The level and basis for the charges are assessed and approved in the Final Decision Distribution Determination by the Australian Energy Regulator. The charges are available on the Endeavour Energy website by searching for Network Price List: Ancillary Network Services (ANS). These charges are amended from time to time.

ANS are either 'fee based' or 'quoted services', depending on how the service charge is determined. The AER determines fee-based service charges based on the cost inputs (labour rates) and the average time taken to perform each service. Quoted services are once-off and specific to a particular customer's request. Charges for quoted services are based on quantities of labour and materials, with the quantities dependent on a particular task. Charges for quoted services are determined at the time of a customer's enquiry.<sup>10</sup>

For large or complex developments, customers are advised to lodge a technical review request with us to determine availability of supply and preferred linkage points and to provide preliminary information to assist in determining the feasibility of your proposals.

Charges for ANS are charged to the customer, customer's electrical professionals (such as an ASP or electrical contractor) or their retailer, depending on the service provided and the circumstances. All fees and charges are to be paid in advance of the relevant activity.

If Endeavour Energy determines that any of the required work is a contestable service, customers are required to pay ASPs for contestable network services and Endeavour Energy for associated ANS.

## 5.2 Reimbursement for work carried out on behalf of Endeavour Energy

---

Endeavour Energy may request customers to undertake works that are additional to the requirements to supply their premises, on behalf of Endeavour Energy. When this situation occurs, Endeavour Energy will pay you for the additional works we require. This situation will only occur where:

- it is economic to combine the new works associated with your new connection and Endeavour Energy's requested works; or
- the additional works requested by Endeavour Energy are necessary for the overall management of the shared network.

Where you have carried out work on our behalf, you will be reimbursed in accordance with the reimbursement

rates set at the time of design certification.

Payment will be made after:

- satisfactory completion of the works;
- payment of all fees and charges;
- receipt of all the relevant documentation for the issue of a letter of acceptance; and
- receipt of a tax invoice claiming the reimbursement.

Written permission noted on the letter of intent is required from the customer to allow Endeavour Energy to reimburse a nominated party.

<sup>10</sup> AER Final Decision Endeavour Energy Distribution Determination 2019-2024 p.7

## 5.3 Charges for removing export constraint on request from a micro embedded generator

---

Where a micro embedded generator wishes to fund the network augmentation to remove a static zero export limit. The embedded generator must engage a suitable ASP to undertake the necessary augmentation works.

As required by the AER's Connection Charge Guidelines, we will contribute to the relevant cost based on the following calculation method.

- Residential connections: the net present value of the export charge revenue received from the connection applicants and the projected future additional micro embedded generation connections over a 30 year period.
- Non-residential connections: the net present value of the export charge revenue received from the connection applicants and the projected future additional micro embedded generation connections over a 15 year period.

The price path for calculating the export charge revenue will be based on the export service charge rates specified in the distribution determination (where relevant) until the end of the relevant regulatory control period.

For the remaining life of the connection, we will use a flat real revenue path after the end of the relevant distribution determination. The flat price path used will be the expected real export charge rate in the final year of the regulatory control period.

The discount rate for the calculation of the net present value of the export charge revenue will be based on the real pre-tax weighted average cost of capital, as set out in the distribution determination.

Despite the time periods specified above for the purpose of calculating the net present value of the projected export service revenue, where the applicable connection period does not reflect a reasonable estimate of the time that the connection service will remain connected, we, acting in good faith, may apply an alternative assumed connection period, based on that reasonable estimate, for that connection service.



## 5.4 Alterations after Drawings are Submitted

---

If customers or their ASPs modify the real estate development plans in a way that impacts the outcomes of the electricity network construction drawings after they have been submitted for certification, we will not be liable for reimbursements of the costs of construction of the shared network assets.

Endeavour Energy may charge a customer for the additional costs incurred from the customer's modifications to a development, including costs associated with the re-certification of the electricity network construction drawings.

## 5.5 Negotiation fee

---

The charge for a negotiated connection offer includes the direct expenses reasonably incurred by Endeavor Energy to assess the application and make a connection offer. We will recover this fee as a debt even if the customer does not accept the connection offer.

All time involved in assessing the application, preparing estimates associated with negotiation and making the connection offer will be charged at the hourly rates set out in the Network Price List: Ancillary Network Services.

## 5.6 Site Inspection fee

---

The charge for connection offer service (basic or standard) does not include a fee for making a site inspection. If Endeavour Energy needs to determine the nature of the connection service sought by the customer by visiting a site an additional charge will apply. Similarly, if the customer requests a site be visited by our staff,

an additional charge will apply based on the estimated time involved. We will recover this fee as a debt even if the customer does not accept the connection offer. All time involved in the site visit will be charged at the hourly rates set out in the Network Price List: Ancillary Network Services.

## 5.7 Guarantee of Revenue

---

Endeavour Energy will require a customer to provide a Guarantee of Revenue (GoR), which is also known as a Security Fee, where their connection requires substantial works to be funded by Endeavour Energy that are initially dedicated to only benefit the customer, and where Endeavour Energy considers there is a high risk that we may not earn the estimated revenue from the construction works.

A GoR is a legally binding agreement between Endeavour Energy and the connection applicant where the connection applicant guarantees to pay Endeavour Energy a minimum level of network charges each year for the duration of the GoR agreement, to make up any shortfall in Endeavour Energy's network charges over the period. The normal agreement period is five years, although this can be varied to between five and ten years on a case-by-case basis.

- The security amount will not be greater than the present value of the incremental costs that Endeavour Energy incurred by funding the connection works.

- The security amount under the GoR will be calculated by reference to the incremental revenue that Endeavour Energy expects to receive as charges from investing in the connection works.
- The security amount will not be greater than the amount of estimated incremental revenue which Endeavour Energy assesses as having a high risk of not being recovered as charges.

The GoR will be established prior to certification of the design and prior to the Endeavour Energy funded works being approved. This will allow the network works to proceed in parallel with the associated contestable works. The GoR is secured by a bank guarantee provided by the customer, or other suitable financial instrument as agreed by Endeavour Energy. Endeavour Energy is entitled to withdraw from the bank guarantee any shortfall in actual network charges, in accordance with the terms stated in the deed and the bank Guarantee.

## 5.8 Pioneer scheme

---

An original customer who has fully funded a network extension is entitled to have some of their costs reimbursed by Endeavour Energy when a new customer connects to that network extension within seven years of the asset being energised by Endeavour Energy. A pioneer scheme only applies to connection applicants connecting to the network extension at a point outside the boundary of the original customer's development. The pioneer scheme commences on the date the network extension asset was energised.

Endeavour Energy may recover the reimbursement amount payable to the original customer from the new customer as part of their connection charges.

The reimbursement amount is the lesser of the calculated refund and the remaining value of the pioneer scheme. The value of the refund is based on:

- the current value of the network extension assets, depreciated on a straight-line basis over a 20 year period, calculated at the date that the new customer accepts the connection offer; and
- the share of the extension used by the new customer relative to other customers already supplied by the extension in terms of maximum capacity, and/or other physical attributes (e.g. length) as applicable.

If Endeavour Energy's pioneer scheme calculates a total refund to all customers already connected to an extension that is less than \$1,250 (real \$2022), then Endeavour Energy is not required to refund those customers.

Details of this calculation and other details in relation to the Pioneer Scheme are provided in Appendix 1.



# : 6. Distributed energy resource connections



This section provides further information about connections that are supported on our network. They are generically referred to as distributed energy resources (DER) and relate to export of energy from equipment on the customers side of their meter into Endeavour Energy’s network. Unlike electricity to the premise, export services have the characteristic that they are not necessarily always available. Many of the examples in this section are relatively new types of connection arrangements.

## 6.1 Dynamic operating envelopes

---

Dynamic operating envelopes refer to connection agreements where there are periods of time when limits are placed on the levels of export and periods when export limits are removed, allowing customers to export higher volumes of electricity into the electricity distribution network and systems.<sup>11</sup> A dynamic export limit allows a customer to export above the basic export level during certain time periods.

The level of exports is managed by Endeavour Energy differently depending on the type of tariff the customer is charged. Customers can choose to either have:

- static export levels where a fixed amount of export at a relatively low level, called the basic export level, is allowed at any time of the day, or

- dynamic export levels, where customers are incentivised to reduce export of electricity when the sun shines such as between 10am-4pm and increase their export during the peak load period such as 4pm-9pm. The objective of the dynamic tariff is to match the level of export with the level of load across the system whilst the load fluctuates throughout the day.

For other distribution connected generation units such as large-scale generation or large-scale storage connections, any export limits that may apply will be part of a negotiated offer.

## 6.2 Static zero export limits

---

There may be rare circumstances at a premise when the export of electricity from premises is not permitted. This is known as a static zero export limit and the limit is set at the basic export level. The circumstances when static zero export limits are applied by Endeavour Energy will be only to the extent necessary to be consistent with the safe, secure and efficient provision and use of distribution services, and Endeavour Energy’s distribution determination.

We will only impose a static zero export limit in circumstances permitted under the AER’s Connection Charge Guideline for Electricity Customers. Our policy on when we will impose a static zero export limit is available on our website.

<sup>11</sup> AER (June 2022) DER Integration expenditure guidance note p.11. “A dynamic operating envelope is a principled allocation of the available hosting capacity to individual or aggregate DER or connection points within a segment of an electricity distribution network in each time interval. Dynamic operating envelopes vary import and export limits over time and location based on the available capacity of the local network or power system as a whole.”



## 6.3 Regulated stand-alone power system (SAPS)

---

SAPS typically comprise solar panels, batteries and back-up generators, and include both microgrids and individual power systems. Endeavour Energy may establish SAPS in communities where a SAPS is cheaper, safer and more reliable than grid supply. SAPS are particularly relevant for remote, bushfire-prone areas where replacement of damaged grid connections are a significant expense.<sup>12</sup>

A regulated SAPS refers to a stand-alone power system that forms part of the national electricity system under the National Electricity Law. A customer seeking a connection to an Endeavour Energy's SAPS is eligible for basic, standard and negotiated service offers under corresponding arrangements as for customers seeking a connection on Endeavour Energy's interconnected network. The same connection charges will apply.

## 6.4 Embedded network

---

A customer may wish to connect an embedded network to Endeavour Energy's network. An embedded network is a distribution system connected at a parent connection point that forms part of the national grid and which is owned, controlled or operated by a person who is not a

network service provider. The connected premises are known as child connection points. Examples include shopping centres, retirement villages, caravan parks, apartment blocks and office buildings,

<sup>12</sup> AEMC (24 Feb 2022) media release "New Rules allow distributors to roll out stand-alone power systems in the NEM."



# Appendix 1: Pioneer scheme



## Establishing Pioneer schemes

A pioneer scheme may apply to customers who have fully funded network extensions where these will be used to connect another customer to Endeavour Energy's network within seven years of the original connection. Customers who have fully funded a network extension are eligible to be reimbursed a proportion of their costs when subsequent customers connect to the network extension that they originally funded. We may recover a refund amount from any subsequent customer as a part of the connection charges payable by the subsequent customers to us.

Each scheme applies for seven years from the date of the energisation of the network connection for the exclusive use of the original customer. If the new connection or connection extension will use assets that are subject to an

existing pioneer scheme, we will tell you at that time. If the new connection or connection extension requires the construction or installation of extension assets for your exclusive use, those assets may be subject to a pioneer scheme.

If the extension assets were constructed to a higher standard or capacity than the least cost technically acceptable standard required by Endeavour Energy, then only the cost of constructing the extension to the scope standard required by Endeavour Energy will be included in the Pioneer Scheme.

Endeavour Energy reimburses the current owners of connection assets subject to a Pioneer Scheme after collecting the amount to be reimbursed from subsequent customers connecting to those assets.

## Cost share reimbursement calculations

The cost share reimbursement shall be calculated as follows:

- Where the subsequent customer's load (as specified in its application for Connection Services or assessed load) is equal to or less than 50 kVA, the cost share reimbursement will be the lesser of
  - the pre-calculated reimbursement; or
  - the original customer's outstanding amount
- Where the subsequent customer's load (as specified in its application for customer connection services or assessed load) is greater than 50 kVA, the cost share reimbursement will be the lesser of the pro-rata reimbursement and the original customer's outstanding amount.

### The pre-calculated reimbursement is calculated:

Where the original customer's works are distribution line, an amount is calculated in accordance with the following formula:

$$\frac{C \times D}{(S + O)} \times \frac{K}{L} \times \frac{CPI_2}{CPI_1}$$

Where:

**C means cost of original customer's works** is the value of the works calculated from the Endeavour Energy's asset valuation supplied as part of the certification package where an ASP carried out the original customer's works.

**D means depreciation factor** which is straight-line depreciation, over a twenty-year asset life, to determine the current day depreciated value of the asset. The depreciation factor is determined as follows:

$$\frac{(\text{Deemed asset life (20 years)} - \text{asset age})}{(\text{Deemed asset life (20 years)})}$$

For example: Cost of line is \$12,000 and actual asset age is 2 years

$$D = \frac{(20 - 2)}{20} = 0.9 \text{ and}$$

Depreciated asset value = \$12,000 x 0.9 = \$10,800

**S means number of prospective subsequent customers** which is the effective number of subsequent customers, including the original customer, who may use the assets or any part of them during the seven years after they were constructed or installed.

This is determined in consultation with the original customer prior to construction of the proposed original customer's works and, considering all relevant factors including but not limited to the capability of the proposed

works, the current number of properties that could potentially utilise those assets, the current zoning of the area and any re-zoning proposals, any proposed

subdivisions or development applications, and historical patterns of customer connection in similar areas.

## Cost share reimbursement calculations cont'

**O means original customer**

**K means length of original customer's works used by subsequent customer (km)**

**L means total length of original customer's works (km)**

**CPI1 means inflation in period 1**, measured as the average of the consumer price indices (All Groups, All Capital Cities), published by the Australian Bureau of Statistics, for the previous 4 quarters immediately prior to the date that the original customer's Connection Assets the subject of a Pioneer Scheme were completed.

**CPI2 means inflation in period 2**, measured as the average of the consumer price indices (All Groups, All Capital Cities), published by the Australian Bureau of

Statistics, for the previous 4 quarters immediately prior to date of the new customer's application for Connection Services.<sup>14</sup>

Where the original customer's works are works other than distribution line, an amount is calculated in accordance with the following formula:

$$\frac{C \times D}{(S + O)} \times \frac{K}{L} \times \frac{CPI_2}{CPI_1}$$

The original customer's outstanding amount is to be calculated as follows:

$$C \times D \times \frac{(N - O)}{(S + O)} \times \frac{CPI_2}{CPI_1} - T$$

## The pro-rata reimbursement

The pro-rata reimbursement is an amount calculated in accordance with the following formula:

$$C \times \frac{(U \times D)}{Z} \times \frac{CPI_2}{CPI_1}$$

Where:

**U means new utilisation of original customer's works**, which is

- a. where the original customer's works are distribution lines, a figure in kVA km, representing the subsequent customer's expected load, in kVA (as specified in its application for Connection Services), multiplied by the length of original customer's works used by the subsequent customer, in km; and
- b. where the original customer's works are assets other than distribution lines, a figure in kVA, representing the subsequent customer's expected load (as specified in its application for Connection Services).

**Z means total utilisation of original customer's works**, which is

- a. where the original customer's works are distribution lines, a figure in kVA km, representing the total of the loads of each customer (including the original customer and the subsequent customer) who use or will use the original customer's works, in kVA (as specified in their respective applications for Connection Services), multiplied by the length of distribution line constituting the original customer's works, in km; and
- b. where the original customer's works are assets other than distribution lines, a figure in kVA, representing the total of the loads of each customer (including the original customer and the subsequent customer) who use or will use the original customer's works (as specified in their respective applications for Connection Services).

<sup>14</sup> Where this calculation results in a negative number it will be assumed to be zero for the purposes of reimbursements.

## Minimum reimbursement

Despite any other cost share reimbursement calculations, a subsequent customer is not liable to pay any cost share reimbursement to all existing customers if the total reimbursement amount is less than:

$$\frac{(\$1213 \times \text{CPI}_2)}{\text{CPI}_3}$$

Where:

**CPI3 means inflation in period 3** means the average of the consumer price indices (All Groups, All Capital Cities), published by the Australian Bureau of Statistics, for the 4 quarters ending 31st December 2022.

Despite any other cost share reimbursement calculations:

- i. The pre-calculated reimbursement, the pro-rata reimbursement and the original customer's

outstanding amount are deemed not to include any references to CPI in the case where the beginning of the relevant period for the calculation of CPI(2) is less than 12 months after the end of the relevant period for the calculation of CPI(1);

- ii. The minimum reimbursement is deemed not to include any references to CPI in the case where the beginning of the relevant period for the calculation of CPI(2) is less than 12 months after the end of the relevant period for the calculation of CPI(3); and
- iii. if all the relevant information to calculate CPI(2) has not been published by the Australian Bureau of Statistics at the time of a subsequent customer's application for Connection Services then the most recent available rates will be used, (i.e. the rates applicable to the previous quarter).

## Reimbursement payments

Where a subsequent customer pays to us an amount towards a Pioneer Scheme, we will, as soon as practicable after receiving that amount, repay that amount to the then current owners of premises connected to the original customer's Extension or Augmentation assets the subject of that Pioneer Scheme.

Where there are multiple original customers because we required those customers to jointly procure and fund the construction or installation of Extension or Augmentation assets, the repayment by us pursuant to reimbursement payments must be divided between those customers in accordance with the proportions in which they funded the Extension or Augmentation assets.

## Obligation to notify

We will notify all new customers, or their representatives, who apply to us for Connection Services and who may be required to make reimbursements under an existing Pioneer Scheme.

When a new customer seeks a new connection or connection alteration that will connect to assets subject to a Pioneer Scheme, we will notify the current owners of premises connected to those assets that they may be entitled to receive a reimbursement.

## Subdivisions and multi-occupant developments

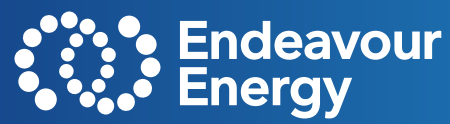
If a proposed subdivision is undertaken in a Pioneer Scheme location, the Connection Applicant will be required to make payment to comply with the Reimbursement Scheme for connection to the network in the same manner that applies for connection of loads.

Subdivision applicants (including strata title subdivisions) will not be eligible to receive reimbursements as original customers.

The load associated with such applications, for the purposes of cost share reimbursement calculations and the pro-rata reimbursement will be determined by Endeavour Energy.

Reimbursements paid by multi-occupant applicants will be regarded as payments on behalf of the declared occupants of the development and no further reimbursements will be required from those occupants when they apply for connection of load.

Further applications for provision of an electricity network or connection of load for premises that benefit from but were not declared in a previous Application for Provision of an Electricity Network may be required to pay reimbursements pursuant to a Pioneer Scheme.



W: [endeavourenergy.com.au](http://endeavourenergy.com.au)  
E: [yoursay@endeavourenergy.com.au](mailto:yoursay@endeavourenergy.com.au)  
T: 133 718



ABN 11 247 365 823