



Embedded Networks

The following information explains Endeavour Energy's approach to Embedded Networks. It is directed at infrastructure developers, embedded network owners or operators, and end customers within these networks.

What is an Embedded Network?

Embedded Networks (ENs) are privately owned electricity networks that serve multiple premises, by delivering electricity from Endeavour Energy's distribution network to the individual households and businesses within a property development. One of the unique aspects of ENs, is that energy can be on-sold to other customers connected within the private network, making this an attractive option for some multi-tenanted sites, such as shopping centres, retirement villages, industrial estates and caravan parks.

An EN is connected to the distribution system and the grid through a 'parent' meter and connection point. The Embedded Network Operator (ENO) operates and maintains the private electricity infrastructure beyond the parent meter, purchases energy from a retailer and on-sells the electricity

to the end customers, dividing the network bill amongst the 'child' connection points. The end customer retains the option of choosing their own retailer, and they do not have to use the same retailer that the EN operator recommends.

From Endeavour Energy's perspective, the parent connection point is the sole customer; and we only see the aggregated usage of the embedded network, not the detail of each end customer's energy consumption. Importantly, customers within an embedded network must address any concerns regarding their connection to the embedded network operator, not Endeavour Energy.

Further information can be found on the AER's website: <https://www.aer.gov.au/consumers/consumers-in-embedded-networks>.



Endeavour Energy's approach to Embedded Networks

Endeavour Energy's network is growing at a rapid rate, driven in part by significant greenfield developments across the network. We want to ensure the grid of tomorrow provides the best possible outcomes to all our customers, by creating a legacy of fair and sustainable infrastructure that allows customers to generate, store, consume and share energy.

Our role in approving and connecting ENs

As the Distributed Network Service Provider (DNSP), Endeavour Energy needs to approve the EN connection to the wider grid and determine the appropriate connection voltage. Through the normal connection process, the developer will request the establishment of an EN to Endeavour Energy. We will then assess the EN's proposed specifications and determine whether the proposal meets our connection requirements.

Information we require as part of a connection application

When submitting an EN application, we will require as a minimum the following supporting documents for our assessment:

- A site plan showing Lot boundaries, tenancy identifiers and proposed Endeavour Energy network connection point;
- A single line electrical diagram, showing the location of the gate (parent), child metering and any other market NMIs;
- A complete list of existing NMI's associated with the EN that will need to be made extinct; and
- A switchboard compliance statement, including construction layout

Our considerations

In approving EN connections we have regard to our [Model Standing Offer for an Embedded Network Metering Standard Connection Service](#). It is the responsibility of the ENO to meet the requirements of all relevant Laws and Endeavour Energy's Connection Standards. This includes several energy laws, such as the Electricity Supply



Act 1995 (NSW) and Service and Installation Rules, the Home Building Act 1989 (NSW), all Australian standards relating to electrical installations and Endeavour Energy's standards and electrical safety rules.

Endeavour Energy will review ENs applications on a case-by-case basis and consider each of them in accordance with these requirements.

We note that significantly greater obligations apply to Endeavour Energy's electricity network, along with a rigorous licensing and compliance framework to ensure a safe, secure and reliable service is provided to our customers. For instance, Endeavour Energy's network is [subject to minimum levels of reliability with customer's entitled to compensation where these standards are not met](#) – equivalent standards do not apply to an EN.

We therefore urge ENOs, and prospective EN customers, to carefully consider whether an EN will meet their energy needs. We note the NSW Government is currently reviewing EN related regulations following [the NSW Legislative Assembly Committee on Law and Safety inquiry](#) that found over-pricing issues, safety risks, limited access to the competitive retail market and insufficient customer protections for EN customers in NSW.

Access to energy and energy security are essential for the health and wellbeing of all residents in NSW. We support and welcome the creation of ENs that comply with relevant laws and standards, and which promote innovative and efficient energy services that benefit the customers within them.

New proposed tariffs

In setting our tariff structures, we must do so in a way that efficiently and equitably allocates our approved revenue across our customer base. An EN customer (i.e., the single 'parent' meter) will be allocated a tariff based on the characteristics of the connection (e.g., voltage and consumption) in accordance with our [Tariff Structure Statement](#) (TSS) that is approved by AER.

We note that for the next regulatory control period (commencing from 1st July 2024) Endeavour Energy is proposing to implement a Low Voltage embedded network tariff that includes an additional demand charge to our standard demand-based tariff.

We have proposed this change to more equitably allocate our costs to customers. Currently, an EN, with potentially hundreds of individual residential and/or small business customers, is treated as a single customer in the contribution they make

to our fixed costs. This means that customers outside of the EN end up making a relatively higher contribution to our fixed costs. We do not consider a customer should be treated differently to customers of a similar type (e.g., residential customers) based on whether they happen to reside within an EN or not. Instead, we consider our fixed costs should be allocated on an equitable basis with differences in bill outcomes instead driven by the energy consumption choices an individual customer makes.

Further information on our proposal, which is subject to AER approval, can be found [here](#).

We also note IPART, on behalf of the NSW Government, is [currently considering](#) whether the Commonwealth Government's Default Market Offer should be used to set a maximum price that EN customers would pay.



We want to ensure the grid of tomorrow provides the best possible outcomes to all our customers, by creating a legacy of fair and sustainable infrastructure that allows customers to generate, store, consume and share energy.



Find out more

For further information, please submit a technical enquiry through our [Connections Portal](#), or contact our Customer Network Solutions team at: cwadmin@endeavourenergy.com.au. Additionally, Endeavour Energy provides additional information on our [website](#).