



Review of regulatory arrangements for embedded networks

AEMC invites submissions on draft report

The AEMC is inviting submissions on its draft report on regulatory arrangements for embedded networks. This draft report finds that the current regulatory arrangements for embedded networks are no longer fit for purpose given the growth in the number of embedded networks and businesses providing services in this sector. The Commission has made draft recommendations that would provide embedded network customers appropriate levels of access to retail competition and consumer protections.

What is an embedded network?

Embedded networks are private electricity networks that serve multiple customers and are connected to another distribution or transmission system in the national grid through a parent connection point. A party, other than the registered local network service provider, owns and operates the private electricity network that customers connect to. The party is known as an embedded network service provider. Generally, the embedded network service provider also purchases electricity at the parent connection point and on-sells it to customers within the embedded network.

Common examples of embedded networks include shopping centres, retirement villages, apartment complexes and caravan parks. Embedded networks may occur as new developments or retrofits of existing buildings. In addition they may, or may not, have distributed energy resources such as solar photovoltaic (PV) panels, battery storage, or diesel generators located within them.

Embedded network service providers must gain exemption from registration as a network service provider. If this party also wishes to sell energy within the embedded network it must also hold a retailer authorisation from the Australian Energy Regulator (AER), or be exempted by the AER from holding a retailer authorisation.

Key findings

In this draft report, the Commission finds that the current regulatory framework for embedded networks is no longer fit for purpose in the face of the rapid growth in number and scope of embedded networks. The AEMC estimates there are over 200,000 electricity customers supplied within an embedded network. The number of exemptions for residential embedded networks has risen from 147 in 2012 to 1,358 in 2016 and it is our view that this number will continue to rise via both new (greenfields) and retrofit (brownfields) developments.

A range of business models providing embedded network services are driving this growth and developments in technology, including distributed generation and energy storage, mean the configuration of and arrangements within, embedded networks are increasingly complex. These developments have brought both opportunities for innovation and new risks for consumers.

The underlying rationale for the current exemption framework is to reduce the regulatory burden for embedded network operators for whom energy supply and sale is incidental to their business. However, with the rapid growth of embedded networks and businesses

providing services in this sector, it is timely to consider alternative regulatory arrangements for this type of supply arrangement.

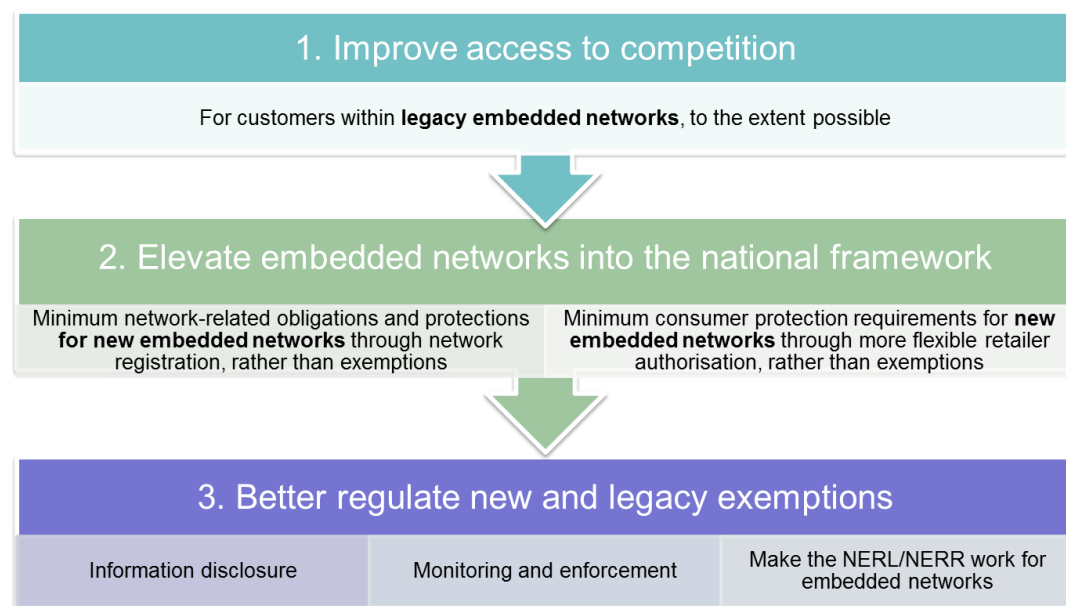
The Commission has assessed the current regulatory arrangements for embedded networks against the principle that customers in embedded networks should be able to access competition and consumer protections, similarly to standard supply customers.

In practice, the Commission has found that, compared with standard supply customers, embedded networks customers receive less consumer protections than customers with standard supply arrangements. Embedded network customers are also less able to change supplier if they are unhappy with the price they are paying or level of service they are receiving. The Commission has also found that the AER does not have appropriate powers to monitor and enforce exemption conditions.

On the basis of these findings, the Commission agrees with the view of many submitters that the existing regulatory framework should be changed so it is fit for purpose in the face of the growth in number and scope of embedded networks and so that there is a greater alignment of the regulation of retailers and network service providers for standard supply customers and embedded network customers.

Draft recommendations

To address the issues that have arisen in relation to access to retail market competition, consumer protections and monitoring and enforcement, the draft report recommends changes to the energy laws and rules with three objectives, as set out in the following diagram:



New embedded networks

In new embedded networks, the sale and supply of electricity to small residential and business customers would be provided by registered embedded network service providers and authorised retailers whose suitability and capability to provide these services would be assessed by AEMO and the AER. Metering would also be provided by accredited providers.

Requiring the sale and supply of electricity to be managed by registered and authorised parties in new embedded networks means equivalent consumer protections and access to competition will be extended to small customers in embedded networks. It also puts in place a clear and transparent regulatory framework which is necessary for encouraging innovation in products and services.

The intention is to provide embedded network customers with access to retail offers and consumer protections that are, as far as practicable, similar to those enjoyed by standard supply customers, but appropriate for the embedded network supply situation.

Existing embedded networks

Transitioning some types of existing embedded networks into the national framework may not be appropriate and the Commission has made separate recommendations to improve access to competition and consumer protections for these. Existing embedded networks would retain their exemptions and continue to be regulated under a modified exemption framework.

Exemptions would also continue to be granted in a narrow set of circumstances where this does not result in significant detriment to consumers. Examples of where exemptions may be appropriate include temporary supply situations such as holiday accommodation, electrical vehicle charging stations or construction sites.

The proposed changes will involve some costs for parties that supply or sell electricity to embedded networks customers. However, costs will be minimised by designing obligations to be proportionate to the issues they are intending to address. Importantly, the benefits of improved consumer protections and access to retail market competition are expected to outweigh these costs.

Also, by establishing a clear and transparent framework that gives regulatory certainty we expect the market to provide embedded network services to continue to develop and mature. This will promote innovation in products and services that can assist in managing energy costs in embedded networks, such as embedded generation and demand management services. Where this is economically efficient, these products and services should also place downward pressure on electricity prices for customers in embedded networks.

Background to the review

The AEMC was requested by the Council of Australian Governments (COAG) Energy Council to undertake a review of the regulatory arrangements for embedded networks in the National Energy Retail Law and the National Energy Retail Rules. In doing this, we were asked to identify and assess any issues for, and the experience of, embedded network customers under the National Energy Retail Law and the National Energy Retail Rules and to identify appropriate solutions to any identified problems. We were also requested to consider broader issues relating to how embedded networks are regulated under the National Electricity Law, National Electricity Rules, National Gas Law and National Gas Rules.

Submissions and a stakeholder workshop

We are inviting written submissions by 17 October 2017. A stakeholder workshop with Commissioners will also be held in Sydney on 4 October 2017.

The final report is due to be published on 28 November 2017.

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