AEMC

INFORMATION

Review of regulatory arrangements for embedded networks

The AEMC has proposed a new regulatory framework for embedded networks to provide embedded network customers with appropriate levels of access to retail competition and consumer protections. The AEMC will start work in 2018 on developing detailed advice on implementing the proposed framework set out in this final report, including preparing and consulting on a description of the law changes and draft rule change requests.

The current framework is not fit for purpose

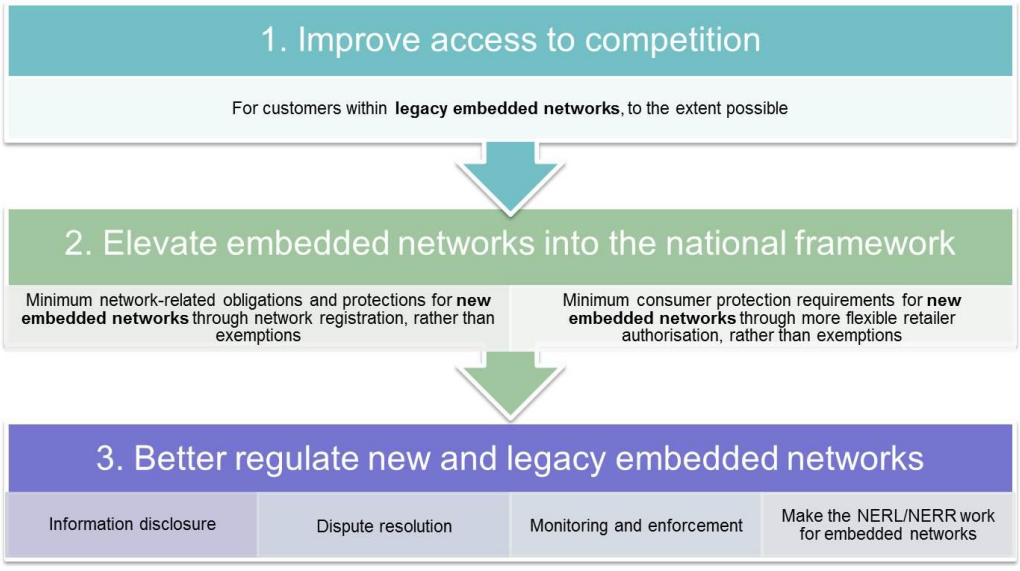
Embedded networks, which are privately owned networks serving multiple customers through a parent connection point, can provide benefits to consumers, provided they are appropriately regulated. These benefits can include the promotion of innovation in products and services that can help manage energy costs in embedded networks such as embedded generation and demand management services.

However, the current regulatory arrangements for embedded networks are resulting in some customers not being able to access competitive prices or important consumer protections. There are also insufficient monitoring and enforcement powers for the Australian Energy Regulator (AER), leading to a lack of clarity that embedded network operators are meeting their obligations as suppliers of an essential service. While some embedded networks are providing benefits to energy consumers they may not receive in a standard supply arrangement, often they do not.

Given the rapid growth in embedded networks these issues should not go unaddressed. The Commission does not see retaining the current regulatory framework for embedded networks as an option.

A new regulatory approach

To address the issues that have arisen in relation to accessing retail market competition, consumer protections and monitoring and enforcement regimes we have recommended new regulatory arrangements for legacy and new embedded networks.



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The recommended regulatory arrangements aim 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

Implementing the recommended regulatory framework will require an inter-dependent package of law and rule changes to:

- improve access to retail market competition for embedded network customers through:
    - new requirements for most legacy, and all new embedded network customers, to be visible in AEMO's market systems, and
    - establishing standard network charging arrangements between on-market retailers and embedded network service providers
- elevate new embedded networks into the national regulatory framework by:
    - requiring registration of embedded network service providers
    - requiring on-sellers to hold a retailer authorisation, and
    - extending the same metering arrangements for standard supply customers to embedded network customers
- narrow the network service provider and retail exemption frameworks to apply to circumstances where:
    - the costs of registration as an embedded network service provider and retailer authorisation would outweigh the benefits to consumers, and
    - the need for regulatory oversight is low
- enhance consumer protections through:
    - improving the AER's ability to monitor and enforce exemption conditions
    - making the National Energy Retail Law (NERL) and National Energy Retail Rules (NERR) work for embedded network customers supplied by an authorised retailer, and
    - improving the information provided to consumers entering embedded networks or involved in a conversion of a property to an embedded network.

A report from MinterEllison, Review of regulatory arrangements for embedded networks - implementation of recommendations in Draft Report is published on the AEMC website to accompany this review. The MinterEllison report provides further detail on how the AEMC's recommended framework can be implemented through the national energy framework.

Gas embedded networks

This review primarily relates to electricity embedded networks. However, the terms of reference for the review required the Commission to also consider the regulation of gas embedded networks. The Commission has recommended the Council of Australian Governments (COAG) Energy Council consider whether the embedded network service provider registration framework should apply to gas embedded networks in order that a single package of electricity and gas law and rule changes can be developed and implemented.

Priority recommendations

The Commission has also made a number of recommendations that should be progressed by other parties including the COAG Energy Council, jurisdictional governments and the AER as a matter of priority, prior to the other law and rule changes recommended in this review. These relate to:

- improving monitoring and enforcement to the extent possible in the current framework
- improving access to ombudsman schemes
- improving awareness of and access to concessions
- improving information provision at the time of purchase or lease of a property
- updating penalty amounts for infringement notices
- reviewing jurisdictional safety and reliability regimes.

New regulatory arrangements would be implemented to improve consumer protections, monitoring and enforcement and access to retail market competition for customers in existing embedded networks

Key findings

Important policy principles, such as providing appropriate regulatory arrangements for exempt sellers, access to competition, and consumer protections, are not met by exempting the operators of embedded networks from important regulatory obligations and market arrangements.

The AEMC estimates there are over 200,000 embedded network customers. 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.

In practice, we have found that, compared with standard supply customers, embedded network customers receive a lesser level of consumer protections. Also, the AER does not have appropriate options to enforce exemption conditions. This situation has been created by regulatory gaps in the retail law and rules, the growth in the number of embedded networks, and the diversity in the capacity and resources of embedded network operators.

We have also found significant practical barriers to customers in embedded networks accessing retail market competition, which means that embedded network customers have limited ability to change supplier if they are unhappy with the price they are paying or level of service that they are receiving. In addition, there are a number of provisions of the retail law and rules that do not operate effectively where authorised retailers are supplying embedded network customers, which is an increasingly common arrangement.

Background to the review

The AEMC was requested by the 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.

FAQs

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.

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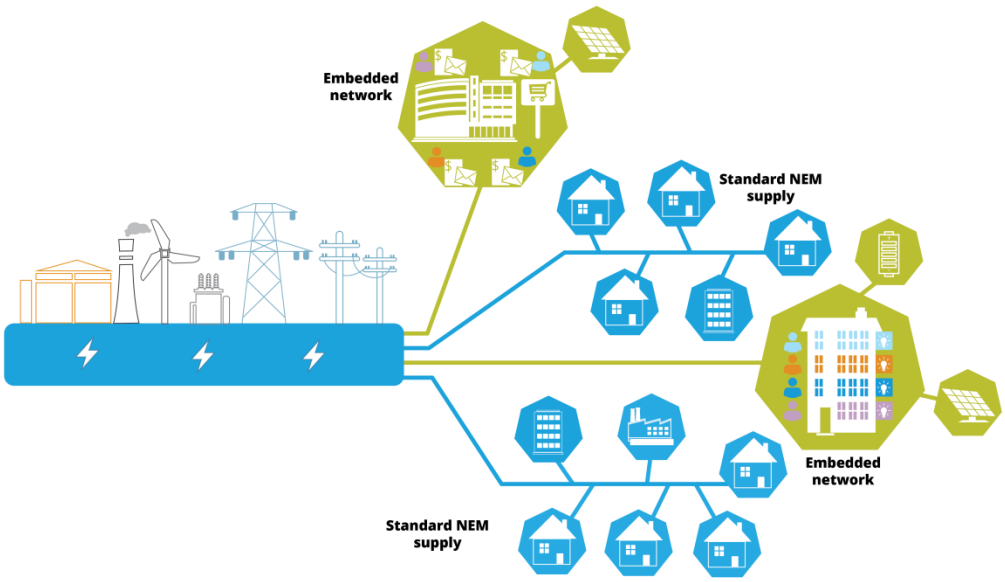

What would the recommended changes mean for existing embedded networks?
The final report recommends that existing embedded networks would retain their exemptions and continue to operate under an exemption framework. However, new regulatory arrangements would be implemented to improve consumer protections, monitoring and enforcement and better access to retail market competition for customers in existing embedded networks.

Some of these changes can be implemented by the AER through changes to their exemption guidelines. A number of law and rule changes will need to be implemented before most of the recommended new obligations on embedded network operators come into effect. The AEMC will start work to develop detailed advice on the necessary law and rule changes in 2018. These processes will provide further opportunities for stakeholder consultation.

Would new embedded networks still be allowed under the proposed framework?
Yes. Provided that they are appropriately regulated, embedded networks can provide benefits to consumers. Consumers in new embedded networks should continue to benefit from greater innovation and choice in products and services. New embedded networks would still be able to offer innovative off-market services that provide price and non-price benefits to customers in competition with on-market retailers.

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 appropriate consumer protections and access to competition will be extended to embedded network customers. It also puts in place a clear and transparent regulatory framework, providing greater regulatory certainty for new and innovative businesses.

We acknowledge there may be extra costs for proponents of new embedded networks compared to current arrangements, however, the Commission considers these costs can be minimised through the detailed development phase and will be proportionate to the benefits of the proposed changes.

Would there still be exemptions for some types of new embedded networks?
Yes. Under the recommended regulatory framework some types of new embedded networks would still be exempted by the AER from being a registered embedded network service provider or authorised retailer where these would not result in important benefits to consumers. The types of embedded networks that would be exempted from registration and authorisation include circumstances where embedded networks supply: infrastructure

A clear and transparent regulatory framework for embedded networks is expected to promote innovation in products and services and place downward pressure on prices for embedded networks customers

such as electrical vehicle charging stations; short duration accommodation such as caravan parks; and large customers who would be in a position to negotiate their terms and conditions.

Would owners corporations or community projects be able to gain exemptions for new embedded networks that supply small residential and business customers?
No. Energy is an essential service for consumers' economic and physical well-being. Even in consumer driven energy projects, a range of compliance and consumer issues, common to all embedded networks, can arise. As such, the Commission does not consider it would be consistent with the national energy objectives to include exemption categories based on the number of energy customers to be supplied or the profit motive of the embedded network operator and on-seller.

The embedded network service providers and on-sellers that serve small customers should be assessed for their capability to provide this essential service and be required to meet a set of minimum standards and provide an appropriate level of enforceable consumer protections.

Registered embedded networks service providers and authorised on-selling retailers will be regulated under the electricity and retail rules instead of the AER's exemption conditions. This will provide consumers greater access to retail market competition and a minimum set of consumer protections which will be better aligned to the protections standard supply customers receive.

An owners corporation is still able to establish an embedded network. To do so it could register with AEMO as an embedded network service provider and obtain a retailer authorisation from the AER, or partner with third parties with the appropriate registration and authorisation. The AEMC has proposed more flexible registration and authorisation processes to accommodate this and to lower costs.

How can small strata developments access embedded network services, including embedded generation such as solar?
There are a growing number of new and existing properties with multiple dwellings that are interested in using new technologies, including embedded solar generation, that can involve establishing an embedded network. The recommended changes would clarify regulatory arrangements that apply to new and existing strata developments that wish to establish an embedded network. Strata developments could register with AEMO as an embedded network service provider and obtain a retailer authorisation from the AER, or partner with third parties with the appropriate registration and authorisation. Strata developments and apartment owners can also invest in embedded generation, for example to supply common areas, without establishing an embedded network.

Will the new regulatory arrangements increase the cost of electricity for embedded network customers?
The proposed changes are expected to put downward pressure on the prices paid for electricity by embedded network customers. Customers in embedded networks often pay close to the maximum allowable price which is usually the standing offer price of the local area retailer. By implementing changes to improve access to retail market competition, exempt sellers and authorised retailers that supply embedded networks customers will face competitive pressure to lower prices or risk losing customers.

Also, by establishing a clear and transparent regulatory framework that improves regulatory certainty we expect the market for 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 economically efficient, these products and services should also place downward pressure on electricity prices for customers in embedded networks.

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