

Date: 5 February 2024

Name: The Australian Energy Regulator

Subject: Submission on issues paper to initiate the review of the AER exemptions framework for embedded networks

Dear Sir/Madam,

We write in response to the Issues Paper for its Review of the AER exemptions framework for embedded networks released by the AER on the 30 November. The AER requested that Key Stakeholders provide consultation by 4pm on Monday, 5 February 2024.

As stated by the AER, the objectives of this review are to:

1. Better understand the harms, or risk of harms, embedded network customers may be facing.
2. Better understand the benefits of embedded networks, and the extent to which customers are receiving them.
3. Determine whether action is needed to redress any imbalance in harms and benefits, including whether we should amend our Network and Retail Guidelines to restrict the growth of future residential embedded networks, strengthen protections for existing embedded network customers, and improve overall transparency.

Our primary points we would like to raise are:

1. **Price and Service Benefits of Embedded Networks are Significant:** The price and service benefits that embedded networks provide seem largely ignored.
2. **Embedded Networks are Microgrids:** The fact that embedded networks are microgrids and come with all the same benefits seems to be missing from the conversation. The significantly important role that embedded networks can play in the future energy grid and energy transition seems largely ignored.
3. **Consumer protection is already on par, and in many cases better, than for onmarket consumers:** In many cases prices, price protection and service for consumers is far better in embedded networks. Existing legislation and regulation already ensures protection for consumers against "harms", which is largely consistent with the same protections that On-market customers receive.

Generally, legislative reviews to date seem far too focused on the negatives rather than the positives. We believe everyone including the consumers would benefit from more balanced industry discussions and reviews. Discussions and review where just as much effort is applied to identifying and communicating the benefits of embedded networks.

Our consultation submission's intent is provide some information and facts on embedded networks that can hopefully inform more balanced discussions.

1 Introduction

The benefits of Embedded Networks

The information, examples and data presented in this letter provides clear and compelling evidence that:

1. Embedded networks provide lower prices
2. Embedded networks provider greater consumer protection especially in times of market crisis and volatility
3. Embedded networks are microgrids and are key enabler for a wide range of benefits that will be critically important for the energy transition
4. Embedded networks are a key enabler for sharing solar and other technologies in multi-tenanted sites
5. The price and service benefits of embedded networks to consumers are significant
6. Consumer protections are already on par with onmarket customers, and in many cases superior.

There is a significant opportunity to provide superior consumer outcomes by a greater application of embedded networks.

We believe it would be in the best interests of the consumer and the energy industry in general if:

- The significant benefits of embedded networks were recognised and promoted
- Embedded networks were recognised as microgrids and as a critical part of the energy transition and the energy system of the future
- The approval process for embedded network conversions was altered to allow embedded networks to be created in a far faster, more efficient and less uncertain approval process.
- When reviewing legislation, regulators looked at embedded networks through the lens of trying to maximise the benefits of embedded networks rather than trying to stifle or limit.

We believe that if the benefits of embedded networks were more widely understood and communicated that many more communities would willingly choose and seek to move to this superior option.

2 Embedded Networks are Microgrids, and are a key part of the energy future

Embedded Networks are Microgrids. Microgrids offer a multifaceted approach to enhancing energy systems, providing significant benefits across various domains. These benefits include:

- **Energy Resilience:** Improved reliability and resilience against power outages and disruptions. Ability to operate autonomously or disconnect from the main grid during emergencies.
- **Energy Independence:** Provides communities, businesses, or critical facilities with greater control over their energy supply. Reduces vulnerability to external factors affecting centralized grids.
- **Cost Savings:** Reduces transmission and distribution costs by generating and consuming electricity locally. Can avoid the need for expensive grid infrastructure upgrades.
- **Renewable Integration:** Facilitates the integration of renewable energy sources (solar, wind, etc.) at a local level. Supports growth of distributed energy resources (DERs), promotes sustainability.
- **Grid Support and Ancillary Services:** Can provide grid support services, such as frequency regulation and voltage control. Offers ancillary services to the main grid, contributing to stability.
- **Emergency Response and Disaster Recovery:** Enhances the resilience of critical infrastructure during natural disasters or emergencies. Facilitates faster recovery by providing a local and reliable power source.
- **Environmental Impact:** Promotes the use of cleaner energy sources, helping to reduce greenhouse gas emissions. Supports sustainability goals and mitigates environmental impacts associated with large-scale power generation.
- **Localized Power Generation:** Enables localized generation of electricity, reducing transmission and distribution losses. Reduces need for centralized power plants and long transmission lines.
- **Efficiency and Optimization:** Allows for efficient utilization of energy resources, especially in combined heat and power (CHP) systems. Enables better demand and load management
- **Adaptability and Scalability:** Adaptable to various scales, from small community microgrids to larger industrial installations. Allows for incremental modular expansion.
- **Technological Innovation:** Drives innovation in energy storage, control systems, and grid management technologies. Supports development and deployment of smart grid technologies.
- **Community Empowerment:** Empowers communities to actively participate in their energy management and decision-making. Encourages local involvement in energy projects and fosters a sense of ownership.



Kind regards

Ben Humphreys

8 August 2023

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Print name

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Signature

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Date

Managing Director

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Position