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Dear David

### **AEMC Submission to the Inquiry into Microgrids and Associated Technologies in WA**

The Australian Energy Market Commission (AEMC or Commission) appreciates the opportunity to submit to the Inquiry into Microgrids and Associated Technologies in Western Australia (Inquiry) that has been extended to it prior to the Committee's second round of hearings.

The national electricity market (NEM) is undergoing rapid and major transformation, driven by government policy, changing consumer preferences and rapidly evolving technology. These changes raise new opportunities for the entire community. They also raise new challenges when it comes to operating and regulating the power system and managing the market.

The Commission's role is to make and amend the energy market rules to support the evolution of Australia's national energy markets in a way that benefits consumers over the long term. We also provide advice to governments to help inform their decisions. There are many ways to address the challenges facing our energy market and power system. We work to deliver targeted, evidence-based, least-cost solutions.

As part of this, we are currently undertaking a review with the intent of developing regulatory arrangements to allow stand-alone power systems to be used where it is economically efficient to do so, while maintaining appropriate consumer protections and service standards.

While the rules relating to the NEM do not apply in Western Australia, we note that the issues associated with microgrids and stand-alone power systems appear similar across the NEM and the wholesale electricity market (WEM) that applies in south-western Western Australia. As such, the Commission looks forward to sharing the progress of its review with the Committee, particularly as it relates to the following areas of the Inquiry:

- the potential for microgrids and associated technologies to contribute to the provision of affordable, secure, reliable and sustainable energy supply, in both metropolitan and regional areas
- regulatory barriers affecting microgrid development and electricity network operations.

The Commission uses the term "stand-alone power system" to refer to both microgrids, which supply electricity to multiple customers, and individual power systems, which relate only to single customers.

Currently, the national energy laws and rules only apply to the interconnected electricity grid underpinning the NEM.<sup>1</sup> As such, stand-alone power systems in NEM jurisdictions are not captured under these national frameworks, and instead are subject only to regulation by states and territories at the jurisdictional level.<sup>2</sup> As stand-alone power systems are becoming more cost efficient compared to traditional grid supply solutions, the requirement for more flexible and robust regulatory frameworks has emerged.

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<sup>1</sup> Certain elements of the national laws and rules also apply to the three major electricity systems in the Northern Territory.

<sup>2</sup> Note that Queensland applies some elements of the national frameworks to stand-alone systems.

In 2017, the Commission considered a rule change request made by Western Power to remove barriers to distributors deploying alternative technologies and methods of providing distribution services, such as transitioning customers to off-grid supply. The Commission engaged a large spectrum of stakeholders in the process, receiving 28 submissions in total.

In its final determination, the Commission concluded that there are likely to be situations where it would be efficient to allow distributors to offer off-grid supply, but that a broader package of changes to laws, rules and state and territory instruments would be required to protect consumers in these instances. Consequently, the Commission determined not to make a rule at that time, but recommended that the COAG Energy Council ask it to provide advice on the rule and law changes that would be required.

Similar conclusions were also reached by the Independent Review into the Future Security of the National Electricity Market (“the Finkel Review”) and the Australian Competition and Consumer Commission (ACCC) in its retail electricity pricing inquiry. The Finkel Review recommended that the COAG Energy Council should direct the AEMC to undertake a review of the regulation of individual power systems and microgrids so that these systems can be used if it is efficient to do so, and the ACCC recommended that immediate work should be undertaken to identify and implement changes to the national energy laws and rules to allow distributors to develop off-grid supply arrangements where efficient.

In light of these recommendations, and the work that it had already been conducting through its Energy Market Transformation work program, the COAG Energy Council provided terms of reference to the Commission in August 2018 to undertake a review of regulatory arrangements for stand-alone power systems under the national energy laws and rules.

Through the review, the Commission aims to develop arrangements to allow stand-alone power systems to be used where it is economically efficient to do so, while maintaining appropriate consumer protections and service standards. The terms of reference for the review set out two priority areas of work:

- Priority 1 is to develop a national framework to facilitate the transition of grid-connected customers to stand-alone power systems supply provided by the current Distribution Network Service Provider (DNSP), as well as a mechanism for the transition of grid-connected customers to third party off-grid supply
- Priority 2 is to develop a national framework for third party stand-alone power systems (i.e. parties that are not currently DNSPs).

The Commission published an issues paper seeking stakeholder input for a first round of consultation on the review in September 2018. The paper explained the background to the review and its scope, set out the proposed approach to assessing identified issues, and discussed a range of issues on which stakeholder comment was sought. The issues identified covered four broad areas:

- The transition to off-grid supply by DNSPs
- Allocation of ongoing roles and responsibilities following this transition
- The application of consumer protections under these arrangements
- A mechanism for transitioning to off-grid supply by parties other than DNSPs

The Commission received 24 submissions in response to the issues paper (including from Western Power and Horizon Power). The project team has also recently met with Western Power, Horizon Power and the Public Utilities Office, and visited Western Power’s trial stand-alone power system sites in the Ravensthorpe area.

The Commission is required to publish a draft report for Priority 1 in December 2018, which will update stakeholders on the Commission’s emerging views on the issues identified above, and begin to set out a recommended framework

to allow distributors to supply their customers through stand-alone systems in lieu of a grid solution where economically efficient.

The Commission looks forward to continued engagement with the Inquiry to inform our thinking and to share findings with the objective of aligning recommendations as far as possible. We look forward to appearing before the Committee to discuss the above. We have also attached to this submission a copy of the issues paper for the review.

Kindly contact our Executive General Manager for Transmission and Distribution Networks, Richard Owens (richard.owens@aemc.gov.au) if you would like to further discuss any aspect of this submission.

Yours sincerely

A handwritten signature in blue ink that reads "Anne Pearson". The signature is written in a cursive, flowing style.

Anne Pearson  
Chief Executive