



Ausgrid Submission

AEMC Electricity Networks Economic Framework Review

July 2020

2 July 2020



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Australian Energy Market Commission
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Lodged online

Dear Ms Moraes,

We welcome the opportunity to comment on the Australian Energy Market Commission's (AEMC) *Electricity Networks Economic Regulatory Framework 2020 Review Approach Paper* (the Approach Paper). This year's review is focused on 'keeping an eye on the horizon' and ensuring that emerging issues are being adequately addressed. We agree with the AEMC's guiding question for the review which seeks views on whether sufficient flexibility exists in the economic regulatory framework for networks to adapt to changes in the market.

As outlined in the 2019 review, we support the ongoing work to integrate distributed energy resources (DER) into the energy system. This work focuses on the tariff, access, network security and information issues needed to realise the potential benefits of DER integration.

Increasing numbers of communities, councils, and cooperatives are contacting Ausgrid about connecting 'community' energy solutions to the network. The AEMC's 2019 review recognised that community projects are likely to play a role in the future electricity grid. In our view, work to realise the benefits of DER integration should be expanded to resolve some of the key issues standing in the way of community projects, including significant metrology and market settlement issues.

In 2019 Ausgrid established a Network Innovation Advisory Committee (NIAC) through which we are collaborating with customer advocates on our innovation program that will help drive the future direction of our network. Our community battery trial, which has the support of our customers, is one of the first projects we are undertaking under our innovation program. Through this project, we are starting to encounter some of the key barriers to the rollout of community energy projects.

We appreciate the AEMC's consultative approach and early engagement on the 2020 review. If you have any queries in respect of this submission, please contact John Skinner on (02) 9269 4367 or john.skinner@ausgrid.com.au

Yours sincerely

A handwritten signature in black ink, appearing to read "Iftekhar Omar", written in a cursive style.

Iftekhar Omar
Head of Regulation

Submission

The electricity industry is undergoing a significant transformation. Households, communities and businesses expect greater choice and control over how they use, produce and store energy. As outlined in the 2019 review, a growing mix of distributed energy resources (DER) is creating challenges in managing the shared distribution and transmission networks.

The AEMC's annual review of the economic regulatory framework is a useful process for ensuring that the right issues are being investigated and addressed. This year's Approach Paper provides an update on work being undertaken to modernise the grid and solve some of the problems associated with the integration of DER. The AEMC is also seeking views on whether there are other issues that should be considered by the AEMC as part of the 2020 review.

Our submission outlines on a few further issues that we think the AEMC should consider:

- How community energy schemes can be better supported, including:
 - o Whether ring fencing is constraining innovation in the context of an evolving energy system.
 - o How market settlement and metering arrangements may need to evolve to promote access to community energy.
- How to incorporate evolving models of customer engagement in the regulatory process

Community energy

Innovation and co-designing solutions with our customers is key to evolving the shared distribution network to efficiently meet the changing needs of customers. Stakeholders have told us that they want a role in driving innovation and the future direction of the distribution network, which will become a shared, open platform, supporting an ecosystem of new technologies and services.

There is a strong community interest in unlocking the potential of community solar and storage solutions to enable more renewables, provide shared access to DER and improve the resilience of communities. The novel use and integration of these new technologies will also enable distribution networks to reduce capital expenditure on traditional poles and wires solutions, thereby placing downward pressure on whole of system costs for customers.

Notwithstanding the many benefits of these developments, further work needs to be done to remove some of the barriers to community energy. We would encourage the AEMC to consider the potential barriers to community energy, and some of the potential long-term solutions, as part of the review.

Ring fencing and network innovation

Customers have told us that they expect distributors to investigate alternatives to traditional network investment in planning for growth and asset replacement. This means that we need to consider options such as demand management solutions and new technologies such as batteries that provide optionality for addressing current and future network needs. The regulatory framework needs to be flexible enough to ensure that distributors can trial new services that customers want.

Over the past ten months we have been collaborating with customers through our Network Innovation Advisory Committee (NIAC) on innovative projects that will help transform our network (See Figure 1).

One of the first projects we are considering is a community battery trial. As a first step in the community battery trial we engaged KPMG to investigate the technical, commercial and regulatory factors impacting the feasibility of a shared community battery as an alternative to traditional network investment.

The KPMG feasibility study demonstrated that community batteries can offer economic benefits across the supply chain, but that there are significant regulatory hurdles to their adoption. Under present arrangements, it is difficult to realise any customer benefits associated with a community battery that is employed as an alternative to meet network needs. This is because ring fencing prevents Ausgrid from offering customers any sort of battery access service.

The Energy Security Board has questioned in its Health of the NEM whether ring fencing is constraining innovation in the context of a transitioning system.¹ As our proposed community battery project has shown, innovation and the development of new services means that existing service classifications will be put under increasing pressure.

We would encourage the AEMC to consider whether current ring fencing and service classification arrangements are flexible enough to allow businesses to innovate and trial new services in collaboration with their customers.

Market settlement and metering issues

There remain barriers for many of our customers seeking to access DER. Many, such as those living in apartments, simply do not have the space to install a DER device. For those that do have space, high upfront costs act as a barrier.

If we are to move to a more equitable share of DER access and improved opportunities to participate as ‘prosumers’, community-based solutions to accessing solar and storage must be explored and could offer a lower cost and more efficient option to individual customers investing in DER.

One of the key barriers to community energy projects is the way energy is settled in the national electricity market.

When energy flows into a customer’s premises, the energy is recorded at the customer’s meter and the customer is charged the full retail tariff by their retailer. This means that community energy flows (from community solar or a community battery, for example) will be charged at the full retail tariff, even though the energy might have only travelled a short distance across the network.

Some practical examples of how this might impact potential community projects include:

- For energy flows associated with a community battery, when a customer flows energy back to their premises, this energy will be charged by the retailer at the full retail tariff, even though the electricity was originally produced at the customer’s premises. This is shown in Figure 2.



Figure 1

¹ Energy Security Board, *Health of the NEM 2019*, Volume 1, page 39

- For peer to peer energy solutions and energy sharing, the customer importing the energy will likewise be charged at the full retail tariff, even though the energy might be originating at the premises next door.

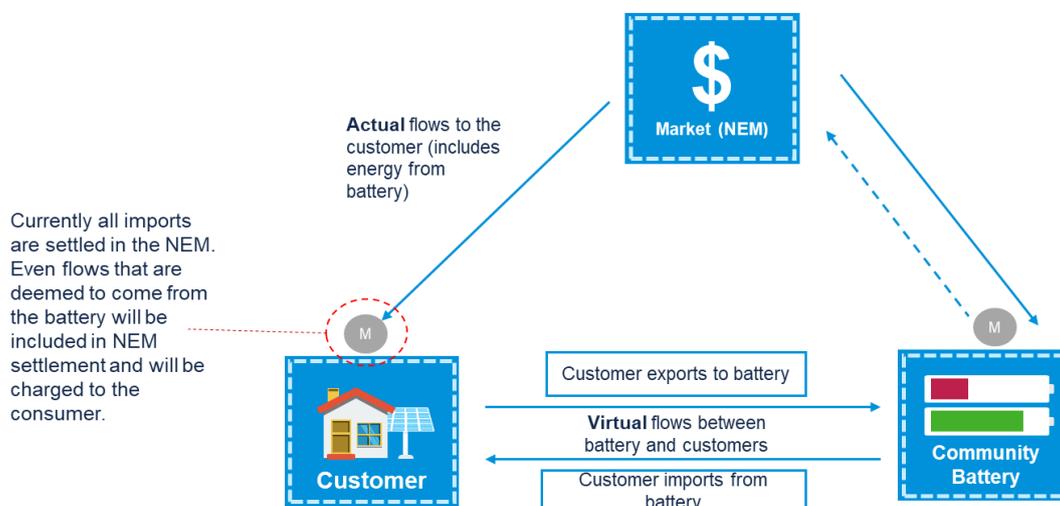


Figure 2

There are potential solutions to this problem, however any solution is likely to be complex and will take time to implement. Building on the 2019 review, we encourage the AEMC to investigate this issue. If we are to ensure that customers who cannot, or do not want to, install their own DER are provided with options to access shared DER, this issue will need to be resolved.

To resolve the market settlement issues identified in the section above, it is likely that changes will be needed to metrology or customer connection arrangements. These issues have been considered before in the context of other policy processes, and it is likely that they will be considered again. We would encourage the AEMC to consider how these issues can be included in the reform program going forward.

Customer engagement

As identified in the Approach Paper, there continues to be a need for enhanced engagement with customers. This is particularly important during the revenue determination process, but also on an ongoing basis throughout the regulatory control period. We encourage the AEMC to consider, in addition to the points raised in the Approach Paper, the following pertinent questions:

- How to ensure customer consultative groups are representative of a network's customer base and have the capability and time to advocate for the right customer outcomes.
- What weight should the AER put on consultation outcomes in reset decisions and how can network businesses meet customer expectations if those expectations are not well captured within the current regulatory framework.

Thank you

Thank you

