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Chair

Australian Energy Market Commission

Submitted via website

ENA submission to AEMC Flexible Trading Arrangements – consultation paper

Energy Networks Australia (ENA) welcomes the opportunity to provide input to the AEMC Flexible Trading Arrangements – consultation paper.

ENA is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

Integration of Consumer Energy Resources (CER) is a key priority for our members, particularly in the low voltage electricity distribution network as they continue to provide safe, reliable and efficient power supply now and into the future.

Key messages

- » Safety remains a key concern for networks
 - Clarity on who controls behind the meter assets is incredibly important to safety and network operations
 - Retailers would need to incur significant costs to meet the required coordination amongst themselves and networks
- » Communicating network pricing signals to customers would be even harder under this proposal
 - The current form of the proposal hinders the implementation and benefits of Dynamic Operating Envelopes (DOEs).
 - It will hinder and obscure other forms of innovative, cost reflective pricing being developed.
- » The scale of reform requires a rigorous CBA
 - The proposed rule is very complex, which will translate into upward pressure on customers' cost of living
 - There is a real chance of exacerbating inequality that is already growing
- » The existing framework can still produce the desired outcomes
 - ENA supports targeted reforms in small device metering and sandbox trails as a prudent step before wider implementation.

- DNSPs are already undertaking trials to procure non-network solutions utilising CER as well as rewarding customer flexibility. DNSPs should not be precluded from engaging with CER directly if it is the most efficient solution.

There are serious safety concerns

Safety is always the top priority for electricity network businesses. Safety obligations arise under the National Electricity Rules (NER), network license conditions and jurisdictional laws. Networks have safety obligations to their staff and to the public and communities in which they operate. We are particularly concerned with ensuring the safety of our staff at customer sites in a high CER future.

Networks are often the first call customers make once something has gone wrong with their supply, or the first people on the ground during natural events such as floods, and there is further risk to our staff with more CER.

Networks require clarity on which party controls behind-the-meter assets. This clarity is necessary for operational safety controls to be effective. This has particular importance to customer and field staff safety and has broader legal consequences for organisations' obligations and liabilities.

Operation of CER assets without full situational awareness, in addition to safety issues, can also damage both customer and network equipment. Clarity on behind-the-meter asset control and responsibility is also required to ensure legal responsibilities are clear and compliance is effective. Establishing full situational awareness for all parties involved is likely to come at significant cost and complexity.

A specific area that requires more clarity in the proposed rule change is Figure 5: AEMOs Flexible Trader Model 2. It is vital that we clearly articulate which party has operational control of "the switch(es)", their obligations in informing and coordinating its operation with other FRMPs who may be active on the site and their customers.

From our experience, the level of uplift needed by retailers (or FRMPs) to ensure customer safety would be significant. We expect this to collectively increase costs to customers. We expand further on this point later in our submission.

Cost reflective pricing will be even harder to achieve

While networks continue to migrate towards cost-reflective tariff structures, there are still significant impediments to customers being shown meaningful cost reflective pricing signals. Historically this is due to a combination of networks being unable to provide individual pricing and retailers smearing these costs in the final retail tariff.

We also acknowledge the need for the transition to reflect social policy objectives such as protecting vulnerable customers.

The paper outlines the potential for multiple Financially Responsible Market Participant (FRMPs) at a site. We are concerned that cost-reflective network pricing will become even more difficult when the customer value stack is divided amongst an increasing (and potentially unlimited) number of secondary FRMPs.

Networks believe the key to efficient investment in the network lies in incentivising customers to use the network in a way that responds to pricing signals at the premises. Splitting the incentives between primary and secondary FRMPs would further dilute the effectiveness of those price signals.

Take for example the application of a demand tariff to a premises. The cost to the shared network is driven by the maximum demand of the customer coincident with the peak demand periods on the network. If the customer is charged based on their total maximum demand, how should that charge be allocated between multiple FRMPs at the premises?

The question becomes particularly difficult given it is likely that one FRMP will be linked to more controllable load and therefore will be more responsive to the price signals the network is trying to send.

However, if the demand charge is split equally between the two FRMPs, or even split on a pro-rata basis, this still may not be sending the most efficient price signals given the different responsiveness of load behind each FRMP.

A key technology to enable the responsiveness of controllable assets at a customer's premises is known as Dynamic Operating Envelopes (DOEs) which is rapidly gaining traction as one of the most effective ways to maximise the value of CER. The AER, government and many parts of industry have already accepted the use of DOEs as a key part of the future electricity system.

Implementing multiple FRMPs at a site would make implementing DOEs more difficult and costly. Early findings from DOE trials suggest that communicating individual DOEs to many different CERs at a single site would rapidly achieve net diminishing returns.

Proposals of this scale require a realistic cost benefit assessment

The changes proposed by FTA are extensive and bring a level of complexity that will almost certainly result in significant costs. ENA believes that this rule change proposal requires a rigorous cost benefit analysis with inputs from key stakeholders before it can proceed further.

Costs among participants (particularly the primary and secondary FRMPs) and to customers are likely to be underestimated. High costs to implement multiple FRMPs at customers' premises will ultimately act as a disincentive to engage in the framework, and may limit the assumed system-wide benefits of the framework.

The current economic climate is already driving upward pressure on customers' cost of living and we believe this proposed reform will only exacerbate the existing challenges in energy inequality.

There is a clear role for trials

While ENA and our members disagree with the proposal as it stands, there are areas where we would support smaller, more targeted trials. Specifically, we would support further proof-of-concept work in sandboxed trials and small device metering.

Further trials would:

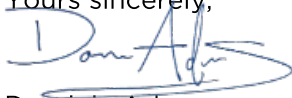
- » demonstrate whether there is an industry desire to implement this framework
- » provide better data on implementation costs for customers who opt-in to such arrangements, and
- » provide more hard evidence to inform implementation at scale without incurring significant stranded asset risk for the entire customer base.

It would be a costly mistake to carry out such widespread reform without at least some hard evidence of benefits or significant support from the industry and customers. The cost of poor reform will be paid by all customers at a time they can least afford it.

Projects like Evolve, Edith, EDGE, and EVGrid are already demonstrating an ability to procure CER in novel ways via Home Energy Management Systems (HEMS) solutions and reward customers for flexibility. Such approaches show that the objectives of this rule may be achieved in other ways, while this rule potentially makes those cost effective solutions more difficult to implement.

If you have any questions or would like to discuss specific topics further, please do not hesitate to contact Dor Son Tan, Head of Distribution dstan@energynetworks.com.au.

Yours sincerely,



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