

SUBMISSION TO UPDATING THE NETWORK AND RETAIL EXEMPTION GUIDELINES - CONSULTATION PAPER



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General Manager, Compliance and Enforcement
Australian Energy Regulator
Melbourne Victoria

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Dear Sir/Madam,

Thank you for the opportunity to submit a response to the Australian Energy Regulator's *Updating the Network and Retail Exemption Guidelines - Consultation Paper*, May 2021.

We are writing to you in our capacity as one of Australia's leading new energy management consultancies. New Energy Ventures has extensive experience working with the creation of embedded networks and virtual power plants (VPPs). Our clients include embedded network operators, property developers and some of the largest energy companies in the country. Our business is directly responsible for the creation of nearly a dozen businesses selling solar PPAs, embedded network operation services and VPP-enabled batteries.

In all our work, there are technical, commercial and regulatory considerations and our role is to ensure all are considered appropriately. Our work commonly intersects with national energy regulation changes, including any changes to the network and retail exemption guidelines.



We have responded to questions 4 and 5 as they are particularly relevant to our work and our client's work creating virtual power plants. While we have views on other areas mentioned, the combined use of the Small Generation Aggregator (SGA) and Embedded Network Manager (ENM) framework are extremely important to ensure DER-scale batteries can participate in the national electricity market (NEM).

We have also considered our response in the context of the National Energy Objective¹. As the proportion of variable and intermittent sources of renewable energy increase in the NEM, batteries will play an important role in ensuring the reliability and security of the grid. Further, where batteries are aggregated in a virtual power plant (VPP), they can provide an important source of power to the grid via the SGA framework.

While this aspect of the NEM is still developing and growing, the long-term impact of enabling these resources is:

- Downward pressure on electricity prices through the supply electricity from sources with very low short-run marginal cost
- Better utilisation of assets from end-use customers
- Improved grid reliability and security by enabling participation of distributed and diverse energy resources
- Improved power quality by enabling participation of DER in C&I in FCAS markets
- Reduced investment and upgrade of costly transmission network expenditure

Embedded networks, and SGAs use of them, are key to unlocking these benefits.

If the AER would like any clarification on our views, please do not hesitate to contact us at: hello@newenergy.ventures

Yours faithfully,

James Allston
Managing Director – New Energy Ventures

¹ The National Electricity Objective as stated in the National Electricity Law (NEL) is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to:

- * price, quality, safety, reliability and security of supply of electricity
- * the reliability, safety and security of the national electricity system



1 Response to Question 4

Question 4: Do stakeholders consider there is a need to regulate SGAs under the network exemption guidelines?

New Energy Ventures believes that SGAs should be regulated under the network exemption guidelines to the extent of providing options to customers within embedded networks as to their choice of FRMP.

We ask the AER - is there any reason why SGAs should not be allowed to sell and purchase power to customers through exempt networks? To this point, the AER has not outlined in its consultation paper the reasons why it is an issue for SGAs to use embedded networks to provide greater choice and access to customers. As the AER points out, these arrangements are not a risk to customers.

We have provided two embedded network case studies for the AER's consideration:

Case Study 1 – Shop Co goes on market with a Market Customer

Shop Co - resides in an embedded network owned by Shopping Centre Co and owns solar and a battery. Shop Co decides to go on-market and contract with Flow Power (a Market Customer that provides customers exposure to the spot market via a retail contract) as their retailer to obtain wholesale market exposure. Shop Co uses Flow Power's services to manage their battery and shape their load and reduce their energy costs and arbitrage the wholesale market.

Case Study 2 – Battery Lease Co leases a battery to Shopping Centre Co

Battery Lease Co owns a large 1MW/1MWh battery behind an 'on-market' child connection point. Battery Lease Co becomes a customer of Shopping Centre Co, an embedded network, consuming and producing power from and to the grid through the embedded network. Battery Lease Co leases the service of the battery to Shopping Centre Co for them to reduce their demand but accesses the NEM via Shopping Centre Cos network using an 'on-market' child connection point. Battery Lease Co has a choice of whether to access the wholesale electricity market via a Market Customer or an SGA but chooses an SGA as it is a more economical means of doing so.

Analysis of case studies

In case 1 and 2, a customer of an embedded network has used the network to access the wholesale market and has a choice of service provider, as they should be allowed to. If Customer A has a choice to access the spot market via a Market Customer, why should Battery Lease Co not be able to have the ability to use an SGA if it is more economical to do so? Both Shop Co and Battery Lease Co have controllable load and generation and should have a choice of FRMP.



Further, if Battery Lease Co has the ability to have an SGA or a Market Customer as a FRMP for their assets, why should an embedded network only be applicable to the Market Customer and not an SGA?

While we agree that the original intent of these embedded network arrangements was to enable customers access to retail competition, we see no increased risk to energy consumers or the grid by these arrangements being used by SGAs to access the electricity markets. If the AER's network exemption guideline was amended to explicitly exclude SGAs using an embedded network this will likely result in negative outcomes for the grid as outlined in our cover letter and a different treatment for SGAs compared to Market Customers.

We acknowledge that the ESB is considering how these types of arrangements should apply in the long-term as part of the Flexible Trading Relationships. However, until these arrangements are properly considered formalised (assumed to be through rule changes), the AER should take a pragmatic approach and make it clear in the AER's exemption guideline that SGAs can use embedded networks. An alternative approach could result in the stranding of existing business models and create compliance issues for existing businesses.

2 Response to Question 5

Do stakeholders interpret SGAs as being captured under the NER?

This question is unclear but we assume the AER means: "do stakeholders interpret SGA's use of embedded networks being captured under the NER's definition of a *network*, thereby requiring the AER to consider SGAs in its guideline?"

As the AER points out, the definition of a *network* in the NER is as follows (italicized terms are defined by the NER):

"The apparatus, equipment, plant and buildings used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail) excluding any *connection assets*. In relation to a *Network Service Provider*, a *network* owned, operated or controlled by that *Network Service Provider*."

In this NER definition the term "customers" is undefined, a broad interpretation can and should be used (importantly, in writing the rules, the AEMC has chosen not to use the defined term of a *Customer* which limits customers to Market Customers as defined by Chapter 2 of the NER). It should also be noted that the AEMC's draft rule on Access, pricing and incentive arrangements for distributed energy resources proposes that this definition change to remove the words "to customers (whether wholesale or retail)" from the Chapter 10 definition of *network*.



The AER has chosen to define customers within its exemption guideline. The AER needs to be careful that by refining its guideline to exclude use of embedded networks by SGAs it is not rewriting the rules. If the AER is seeking to exclude SGAs from using embedded networks, we recommend they submit the issue to the AEMC for consideration.

