

5 February 2024

Mr Mark Feather,
General Manager, Policy
Australian Energy Regulator
By email: AERexemptions@aer.gov.au

Dear Mr Feather

SUBMISSION ON REVIEW OF THE AER EXEMPTIONS FRAMEWORK FOR EMBEDDED NETWORKS

Compliance Quarter supports the AER's review of the exemptions framework for embedded networks (**Review**). This is Compliance Quarter's submission on the AER's issues paper of 30 November 2023. Compliance Quarter was established in 2017 to provide compliance and regulatory support to energy sellers operating across the National Electricity Market. Our primary business activities include obtaining retailer authorisations, establishing and improving compliance programs, and reviewing and responding to proposed regulatory changes.

This submission does not respond to all of the questions posed in the issues paper.

- 1) Do stakeholders consider one factor or principle should take precedence over another? If so, what weighting should we give the various principles or factors provided by the Retail Law and set out above, to support any case for change to the exemptions framework?**
- 2) Is the AER's proposed approach to the exemption framework review the preferred approach? If not, what other factors or criteria should the AER consider?**

Compliance Quarter agrees with the criteria proposed but also proposes that 'impact on emissions reduction' be added as an additional criterion, consistent with the NEO.¹ In assessing impact on emissions reduction, regard should be had to the implications of the establishment of an embedded network in terms of shared solar PV resources and the installation of electric vehicle (EV) charging facilities.

- 3) Is our proposed review scope reasonable? If not, what other supply arrangements should be considered and why?**

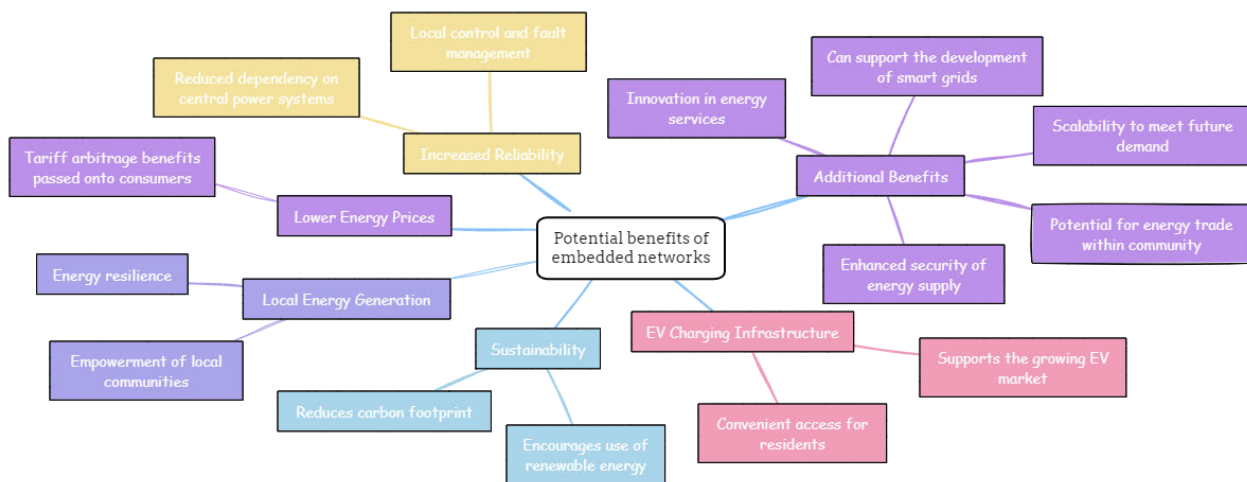
We agree with the proposed approach.

¹ See <https://www.energy.gov.au/energy-and-climate-change-ministerial-council/working-groups/governance-working-group/incorporating-emissions-reduction-objective-national-energy-objectives>

10) What kind of innovative and emissions reduction arrangements can embedded networks offer residential customers? 11) What other benefits are there for residential embedded network customers?

Embedded networks can significantly benefit consumers and the wider distribution network via load aggregation and demand reduction,² by providing access to lower prices, and by providing access to technology including EV charging.

Potential benefits of embedded networks in terms of reliability, emissions reductions, and to consumers are summarised in the image below:



Embedded networks enable the maximisation of self-generation of renewable energy. The NSW Committee on Law and Safety recently found various potential consumers harms within embedded networks but also that embedded networks can future proof developments by facilitating greater access than grid-connected developments to renewable energy and storage and innovative technology, including EV charging. And, further, that embedded networks can increase energy efficiency and have decarbonisation benefits, including through increasing access to renewable energy and storage and using excess energy generated across multiple consumers.³

The take up of electric vehicles will continue to accelerate in Australia and we say that embedded networks are pivotal to the take-up of electric vehicles with capital investments in shared and dedicated charging stations. Embedded networks can facilitate more strategic planning and implementation of EV charging infrastructure, ensuring that the energy capacity is aligned with the demand from EV users. This planning can include the integration of energy storage solutions to buffer the demand on the grid and ensure a reliable charging service.⁴

² Roberts, M., Bruce, A., & Macgill, I. (2018). Collective prosumerism: Accessing the potential of embedded networks to increase the deployment of distributed generation on Australian apartment buildings. 2018 IEEE International Energy Conference (ENERGYCON), 1-6. <https://doi.org/10.1109/ENERGYCON.2018.8398770>.

³ NSW Committee on Law and Safety Report on Embedded Networks in NSW para 2.162 (see <https://www.parliament.nsw.gov.au/ladocs/inquiries/2873/Report%20-%20Embedded%20Networks%20in%20New%20South%20Wales.pdf>)

⁴ Alanne, K., & Liimatainen, H. (2019). Design implications of the electrification of passenger vehicle stock on renewable energy integration in Finnish apartment buildings. *Sustainable Cities and Society*. <https://doi.org/10.1016/J.SCS.2019.101507>.

Embedded networks facilitate charging within residential apartment blocks- allowing residents to charge where they live. Research indicates that up to 90% of EV owners prefer home charging due to its convenience and the possibility of using renewable energy sources.⁵ Additionally, research on consumer behavior in Germany reveals a willingness to pay more for the convenience of charging at home, underscoring the perceived value of home-based charging over alternatives like workplace or roadside charging.⁶

15) What other harms do embedded network customers face?

We strongly support the strengthening of the regulatory framework to address the issues that consumers have faced within embedded networks. We note that consumers within embedded networks face practical barriers in exercising their 'right' to choose an alternative supplier. We support the recommendations of the Australian Energy Market Commission, including the establishment of the embedded network service provider role.⁷

We note that Compliance Quarter obtained documentation under a Freedom of Information request that indicates that State Energy Ministers (at the time) voted against the implementation of the AEMC's final law and rule changes.⁸ Those proposed changes were widely supported by industry and consumer advocacy groups. This has, unfortunately, resulted in a continuation of the regulatory framework that is widely considered to be not fit for purpose.

We believe that work is required to introduce standardised billing arrangements for the recovery of external network charges from embedded network customers who choose to go 'on-market' with an alternative retailer.


16) How can we maximise the extent to which any changes to our Guidelines complements jurisdictional actions and minimise the risk of misalignment or duplication?

We do not support separate jurisdictional derogations and support a nationally consistent framework. We say that the results of this review should seek to address issues being considered in jurisdictions such as NSW.

24) What support is there to stop the expansion of residential embedded networks by closing the NR2 registrable network exemption class?

We do not support closing the NR2 registrable network exemption class as it will result in consumer detriment. We support changes that address identified consumer harms so that embedded network consumers are not disadvantaged when compared to on market consumers.

Yours Sincerely,



Director

⁵ Marinescu, C. (2022). Progress in the Development and Implementation of Residential EV Charging Stations Based on Renewable Energy Sources. Energies. <https://doi.org/10.3390/en16010179>.

⁶ Wolff, S., & Madlener, R. (2019). Charged up? Preferences for Electric Vehicle Charging and Implications for Charging Infrastructure Planning. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3491629>.

⁷ AEMC, Updating the regulatory frameworks for embedded networks, Final report, 20 June 2019 (see for example paragraphs 55-59).

⁸ Request F2021/000530 (see <https://www.energymining.sa.gov.au/about/open-government/freedom-of-information/disclosure-log>)