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Dear Mr Feather,

**RE: Submission to the Review of the AER exemptions framework for embedded networks**

Origin Energy (Origin) appreciates the opportunity to provide a response to the (Australian Energy Regulator's (AER's) issues paper in relation to its Review of the exemptions framework for embedded networks.

Origin strongly believes that all customers in an embedded network should have access to essential services at a fair price and be afforded consumer protections consistent with those provided to mass market customers. This is even more important as embedded networks continue to grow as an alternative to standard supply arrangements.

We understand the concerns of the AER that the current regulatory framework may not afford customers in embedded networks the same benefits and entitlements of customers connected directly to the grid.

Origin's view is that customers in embedded networks should have access to consumer protections and regulatory oversight consistent with the standard applicable to mass market retail customers. This includes access to all applicable residential customer rebates and concessions, hardship policies, and the Energy and Water Ombudsman scheme and associated dispute resolution services.

This view extends to pricing. All customers, regardless of whether they are in an embedded network or connected directly to the distribution system, ought to have access to the best offer for their circumstances. It is important to recognise that the best offer may not always be provided by a retail offer but may in fact be one that is provided by virtue of an embedded network's scale and single buyer power. The ability to aggregate the load within an embedded network often allows embedded networks to access energy rates lower than could otherwise be achieved. This ability allows the embedded network operator to pass on the benefits of its scale purchases so that its embedded network customers automatically receive a rate commensurate with the most competitive offers.

Aside from the price benefits associated with an aggregated load, embedded networks also provide the physical infrastructure to allow the entire building to participate and benefit from renewables (including Solar PV, batteries, electric vehicle charging, demand response, etc.), rather than just one sub-scale apartment or common area meter. In the absence of embedded networks, these initiatives are prohibitively complex and costly for individual apartment residents to participate in.

We consider it essential that the compliance and enforcement regime be comprehensive and robust to provide comfort to embedded network customers that exempt sellers are operating in their best interest. Our preferred position is for all energy sellers in embedded networks in NERL jurisdictions (excluding electric vehicle chargers) to be required to hold a retailer authorisation and comply with the obligations imposed on retailers under the Retail Law (to the extent applicable to embedded network customers). We consider that the existing compliance and oversight should be strengthened to ensure that embedded networks are operating as intended and providing consumer protections consistent with that provided to mass-market customers.

Origin's responses to selected questions raised in the issues paper are provided below.

*Q1. 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?*

The AER identifies a number of principles and factors in the Retail Law that may be considered when granting retail exemptions. Of the principles identified, we consider principle (1), consistency with regulatory arrangements applying to retailers, and principle (3), application of customer protections, are of most importance when granting network exemptions. Specifically, our preferred position is for energy sellers in embedded networks (excluding electric vehicle chargers) to be required to hold a retailer authorisation.<sup>1</sup> In addition, Origin's view is that all customers in an embedded network should be afforded, to the extent possible, customer protections consistent with those provided to mass market retail customers.

While the right to choose a retailer (principle (2)), is also important, we agree it has not been practicable for customers to exit embedded networks for various technical reasons, but also because customers within embedded networks should be receiving the price benefits of lower costs to deliver energy. Given that often customers value an automatic price discount more than the ability to exit the embedded network, we would argue that principle (2) is a less important consideration.

Given Origin's view that energy sellers in embedded networks, as a general principle (excluding electric vehicle chargers), be required to hold a retailer authorisation, we consider the factors identified in the issues paper are of less importance when considering retail exemptions.

*Q2. Is the AER's proposed approach to the exemption framework review the preferred approach? If no, what other factors or criteria should the AER consider?*

The AER propose the following criteria to guide its assessment of the exemption framework and alternative options:

- Benefits to consumers.
- Harms to consumers (and risk of harms).
- Costs for exempt entities.
- Administrative cost for the AER.
- The AER's ability to monitor and enforce compliance.

We consider the criteria to be reasonable but suggest that the most weight should be assigned to the benefits and harms to customers. We also agree with the proposed factors for the assessment focussing on the long-term interests of energy customers in relation to price, quality, safety, reliability, security of supply, and emissions reduction. We consider these factors should be equally weighted in the AER's review.

*Q3. Is our proposed review scope reasonable? If not, what other supply arrangements should be considered and why?*

We consider a focus on the supply of energy to higher-density residential embedded networks is reasonable given the prevalence of these networks. Given the importance of compliance and performance monitoring, and family violence protections, we consider that extending the review to consider these issues for all residential embedded network customers (including those residing in higher-density residential complexes, caravan parks and retirement villages) is appropriate.

In conducting the review, however, we would caution against an over-reliance on previous inquiries into embedded networks given the tendency to bias negative experiences, often associated with smaller retailers.

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<sup>1</sup> In relation to electric vehicle charging, we support the current arrangement where the AER does not regulate the associated energy usage. Given the complexity and potential cost associated with regulating electric vehicle charging, we consider that any proposed regulation should be subject to detailed analysis and a rigorous cost benefit assessment before contemplating its introduction.

*Q4. What factors are driving the increase in residential exemptions?*

We believe there are a number of factors driving the growth of residential embedded networks including:

- Growth in higher-density apartment and townhouse living – the Australian Bureau of Statistics indicates that apartment living continues to grow and is now the most common form of new dwelling.<sup>2</sup>
- Developer requirements – embedded network operators are often able to meet the needs of developers more readily in terms of efficient building design, cost minimisation, adherence to building schedules, price benefits to end-users, and new services.
- New services – developers are wanting new sustainability services, which their purchasers are increasingly demanding. These services include electric vehicle charging, solar, batteries, etc., and all require an embedded network to be optimally utilised by the building.
- Lower costs for end-users – bulk purchase of energy, lower network charges, and other efficiencies contribute to lower energy delivery costs for embedded networks. Most developers and Owners Corporations are seeking embedded networks to enable cost savings to feed into lower end-user energy prices.

*Q5. Which factors are having the biggest influence?*

At a macro level, we consider that growth in higher-density apartment living is the primary factor driving the growth in embedded networks. At a more micro-level, developer requirements for design and cost minimisation have been the greatest contributor to embedded network growth. However, this is being quickly overtaken by the need for new sustainable services and favourable end-user pricing.

*Q6. How common is it for new residential developments to be built as embedded networks?*

In Origin's experience, the majority of new residential developments are built as embedded networks. This varies to some extent by the size of the complex and by jurisdiction. Queensland for example is a very established market for embedded networks and we would estimate that almost all apartment buildings over 20 apartments in size would be embedded networks.

In NSW, we would estimate that over 75 per cent of apartment buildings over 50 apartments would be embedded networks. This figure has been growing quickly over the last few years and continues to grow. We note that embedded networks in NSW only started to become popular 5 to 7 years ago, and hence there is still some inertia leading to the legacy on-market approach for this segment.

*Q7. How do embedded networks result in lower energy prices for residential customers? Please provide supporting information.*

The ability to aggregate the load within an embedded network often allows embedded networks to access energy rates lower than could otherwise be achieved. Origin aims to pass on the benefits of its scale purchases so that its embedded network customers automatically receive a rate commensurate with Origin's most competitive offers. In Origin's case, we aim to provide our embedded network customers with a usage charge that is significantly lower than the Default Market Offer (DMO) usage charge. For example, at present, we aim to provide a standard usage discount on the DMO of up to 15 per cent for embedded network customers in Ausgrid distribution networks.

While Origin's approach is not consistent with all other embedded network operators, it does highlight the benefits that can accrue to customers. In our case, this means customers being provided with prices lower than the DMO without the need to shop around. As stated, the reason we can provide this to our customers is because of the scale and single buyer benefits of an embedded network.

*Q8. How do infrastructure costs for new developments built as embedded networks compare to non-embedded networks?*

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<sup>2</sup> ABS 2021 Census and ABS Building Approvals, November 2023.

We note that infrastructure costs do not vary significantly for embedded network developments compared to non-embedded network developments – the internal network wiring costs are very similar between the developments. There are some additional costs for the gate meter on the main switch board for an embedded network but there may also be some offsetting savings from design changes and better integration with installation schedules for an embedded network.

*Q9. How do higher-density complexes configured as embedded networks benefit residential buyers? Please provide supporting information.*

The main benefits associated with an embedded network is lower residential charges that are automatically applied and do not need to be negotiated periodically. Embedded networks also provide the physical infrastructure to allow the entire building to participate and benefit from renewables (including Solar PV, batteries, electric vehicle charging, demand response, etc.), rather than just one sub-scale apartment or common area meter.

*Q10. What kind of innovative and emissions reduction arrangements can embedded networks offer residential customers?*

It is prohibitively complex and costly for individual apartment residents to participate in Solar PV, batteries, electric vehicle charging, demand response, etc. However, at the communal embedded network building level, these initiatives are not only feasible but ensure maximum efficiency. An embedded network ensures that excess solar generation or battery storage is not wasted (i.e., exported or lost) and can be used across multiple residents. Embedded networks can also allow solar generation or battery storage to be utilised more effectively than individually serviced meters, such as to reduce maximum demand distribution changes and other costs to the entire building.

*Q11. What other benefits are there for residential embedded network customers?*

A key consideration for residential developments is the future-proofing for new technology and innovation. As energy technology is changing quickly, setting-up residential buildings initially as embedded networks ensures these buildings can take advantage of new technologies. Examples could include energy trading within buildings at the individual apartment level, or more macro-level benefits such as those from demand response options (i.e. to minimise new generation/network investment and protect the network in high demand periods).

*Q13. What is the evidence that supports the view that embedded network customers are paying higher energy prices compared to on-market retail customers?*

As discussed, on average, Origin embedded network customers receive a total bill discount to the DMO significantly lower than non-EN customers. That is, Origin does not support the view that embedded network customers are paying higher energy prices compared to on-market retail customers.

However, anecdotal evidence is that some non-Origin embedded network buildings (including in NSW) receive minimal or no discount to the DMO. For these buildings this could suggest that some embedded network customers are paying higher energy prices compared to on-market retail customers on average. While Origin acknowledges the limited access to retail competition faced by embedded network end-user customers, for various reasons, we believe there is strong and growing competition at the building level (i.e. Owners Corporations) to ensure that residents are receiving the best possible electricity price for their residents.

*Q14. What evidence is available to understand the scale, extent or risk of harms?*

Origin strongly believes that customers in embedded networks should, to the extent possible, be afforded retail consumer protections consistent with that provided to mass market retail customers. This should include access to all applicable residential customer rebates and concessions, hardship policies, and the Energy and Water Ombudsman scheme and associated dispute resolution services.

Origin retails to embedded network customers in NERL jurisdictions under its retailer authorisation. As a general principle we believe that all energy sellers in embedded networks (excluding electric vehicle

chargers) should be required to hold a retailer authorisation and the consumer protections in the Retail Law should apply (to the extent applicable) to embedded network customers.

As a result of the above, we do not see significant risk of harms arising from adoption of embedded networks.

*Q15. What other harms do embedded network customers face?*

Origin is not aware of other harms from embedded networks.

*Q16. How can we maximise the extent to which any changes to our Guidelines complements jurisdictional actions and minimise the risk of misalignment or duplication?*

No specific comment other than the point that we support the National Energy Customer Framework obligations for embedded networks (where these are applicable).

*Q19. What are the risks and implications for embedded network service providers, prospective exempt sellers, customers and other relevant third parties if we revised the NR2 registrable network class exemption activity criteria to include prescribed customer benefits that must be met by NR2 registrable network class exemption holders? How could the risks be mitigated?*

Origin agrees that embedded network customers should receive benefits of being part of an embedded network, be that price, product or building sustainability benefits. Origin agrees that a largely automated registered exemption framework approach is preferable to a more detailed assessment prior to registration. However, we question the value of this approach if the AER does not have ability or resources to ensure compliance with the promised benefits.

*Q20. If we were to prescribe a list of specific embedded network customer benefits, what could be included?*

Origin would not recommend that all embedded networks be required to meet a specific list of customer benefits. Specific building requirements and trade-offs that need to be made as part of the decision process for each individual building make the application of generic obligations problematic.

Notwithstanding the above, a non-exhaustive list of benefits that could be considered for new residential embedded networks include the following. Noting, again, that not all benefits will be applicable to all buildings:

- Price benefits e.g., discounts to the DMO.
- Use of renewables, including solar PV, batteries, demand response, GreenPower.
- Electric Vehicle charging – access to charging stations, and benefits from load management systems.
- Future-proofing and innovation – energy technology is changing quickly, and setting-up residential buildings initially as embedded networks ensures these buildings can take advantage of new technologies. Examples could include energy trading within buildings at the individual apartment level, or more macro-level benefits such as those from demand response options (i.e., to minimise new generation/network investment and protect the network in high demand periods).

*Q21. What other regulatory approaches would enable the AER to ensure future embedded networks are beneficial to customers?*

Origin retails to embedded network customers in NERL jurisdictions under its retailer authorisation. As a general principle we believe all energy sellers in embedded networks (excluding electric vehicle chargers) should be required to hold a retailer authorisation and the consumer protections in the Retail Law should apply (to the extent applicable) to embedded network customers.

*Q22. What are the risks to embedded network service providers, prospective exempt sellers, customers and other relevant third parties if we introduced a requirement to apply to the AER to register an NR2 network class exemption?*

A key risk is the potential for bottlenecks and delays in approvals, if the AER is not appropriately resourced, which could impact buildings schedules and costs. There is also a risk of increased administrative cost to the AER and embedded network service providers that will ultimately be borne by customers.

Origin does not agree with the AER's suggestion to apply the same approval process currently used for brownfield conversions/retrofit sites. Many of the requirements which apply to retrofit sites which are being converted from on-market to off-market, such as EIC and offer matching will not be directly relevant to an on-market site requiring NR2 registration.

Another consideration is how the AER would apply this approval requirement in circumstances where there are multiple persons who are required to register an NR2 network class exemption in respect of the same site. In circumstances where each party must apply to the AER in order to register, this is likely to also contribute to further delays in approvals and implementation of the embedded network.

*Q23. What are the implications of requiring embedded network service providers to demonstrate customer benefits before being permitted to register an NR2 network class exemption?*

We consider there would be some administrative burden and cost increase for embedded network service providers.

Another key implication is that in circumstances where the AER refuses an NR2 registration application, prospective customers are potentially stranded in an embedded network that is unable to operate to supply energy to customers because regulatory approval has not been granted. It is not clear how the AER intends to address this potential consequence of approval not being granted.

*Q24. What support is there to stop the expansion of residential embedded networks by closing the NR2 registrable network exemption class?*

Origin is strongly against stopping the expansion of residential embedded networks, as the benefits of well managed embedded networks, far outweigh the downsides.

*Q25. What would be the impacts on customers, embedded network service providers, exempt sellers, embedded network managers, and other parties if we ceased granting exemptions for embedded networks with more than 10 residential customers? Please provide information to support your views.*

We consider that the ceasing of exemptions for embedded networks could have the following consequences:

- Price increases – without the benefits of aggregating load, Origin embedded network customers would, on average, receive higher prices.
- Renewables – apartment buildings would face more challenges in incorporating solar PV, batteries, GreenPower, etc. in their developments.
- Electric Vehicle charging – access to charging stations and load management systems to effectively manage power load will be more challenging.
- Future-proofing and innovation – residential buildings would be limited in their ability to take-up new technologies in renewables and energy efficiency solutions.

*Q26. What compliance breaches should exempt sellers be required to submit to the AER, if they on-sell to residential customers?*

Origin believes exempt sellers should be required to submit to the AER the same information that licenced retailers are required to provide. This helps ensure that embedded network customers receive the same protections as on-market customers, as exempt sellers are subject to the same scrutiny as licenced retailers.

*Q27. What performance reporting indicators would best support the AER to identify consumer trends and inform regulatory reform for embedded networks.*

Origin believes exempt sellers should be required to submit to the AER the same information that licenced retailers are required to provide.

*Q28. What would be the benefits, costs and risks to exempt sellers, and other stakeholders, if the AER were to impose compliance and/or performance reporting obligations on exempt sellers, who on-sell to residential customers?*

Ensuring compliance and performance reporting obligations are aligned with on-market customers helps to ensure that embedded network customers receive the same protections as on-market customers, as exempt sellers are subject to the same scrutiny and reporting requirements as licenced retailers.

*Q29. Should we extend any compliance reporting obligations to exempt embedded network service providers, via the Network Guideline?*

Origin is opposed to any mandatory compliance reporting requirement applying to ENSPs under the Network Guideline, particularly in circumstances where registered participants in the NEM (including registered network service providers) are not currently subject to a mandatory breach reporting regime (only voluntary self-reporting).

*Q30. Should family violence obligations be extended to exempt sellers who on-sell to residential and small business customers?*

Yes.

If you have any questions regarding this submission, please contact Gary Davies in the first instance at

[REDACTED]

Yours sincerely



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