Final Decision
United Energy
Ring-fencing Waiver

Pole-mounted Battery Trial

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AUSTRALIAN
ENERGY
REGULATOR

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Contents

Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
ARENA	Australian Renewable Energy Agency
BESS	Battery energy storage system
CAM	Cost Allocation Methodology
DNSP	Distribution network service provider
ENA	Energy Networks Australia
EUAA	Energy Users Association of Australia
FCAS	Frequency control ancillary services
Guideline	Ring-fencing Guideline Electricity Distribution – Version 2, October 2017
NEO	National Electricity Objective
NER	National Electricity Rules
NSP	Network service provider
RAB	Regulated asset base

1 Introduction

On 12 October 2020, United Energy submitted an application to the AER requesting a waiver from its obligation under clause 3.1(b) of the Electricity Distribution Ring-fencing Guideline (the **Guideline**).[1] Clause 3.1(b) states that a distribution network service provider (**DNSP**) may provide distribution services and transmission services but must not provide other services.

As part of its application, United Energy proposes to purchase 40 new pole-mounted battery energy storage system (**BESS**) units, to install in the low voltage network, which would be used as part of a trial. In addition to using the BESS units to provide distribution services, it intends to lease unutilised capacity to an unaffiliated retailer partner, selected through a competitive tender process.

United Energy considers its proposed battery trial would have positive outcomes for consumers. The trial aims to determine whether the BESS units can defer or avoid network augmentation. United Energy is also optimistic the trial will demonstrate how BESS units could be incorporated into the distribution network as a cost effective means of increasing renewable generation to the network. Compared with augmentation, United Energy suggests customers would benefit from improved network performance and reliability provided at a lower cost.

We agree with United Energy in terms of the potential benefits arising from the trial. We expect that by granting the waiver there is potential for long-term benefits to consumers. We consider the two main harms that the Guideline aims to prevent (the risk of cross-subsidisation and discrimination) are adequately addressed by the trial approach and cost allocation approach set out in United Energy's application.

On the basis of the information supplied in United Energy's application, the AER agrees to grant United Energy a waiver of its ring-fencing obligation in clause 3.1(b) of the Guideline, effective from 4 December 2020. The waiver will allow United Energy to lease the storage capacity of pole-mounted battery units to a retailer partner, as part of a trial project until 30 June 2026.

1.1 What is ring-fencing?

Ring-fencing refers to the separation of the direct control distribution services provided by a DNSP from the provision of unregulated or contestable services by a DNSP, or an affiliated entity. That is, the separation of regulated and competitive business activities to support competitive markets. The Guideline sets out obligations that apply to a DNSP if it wishes to provide unregulated or contestable services. These obligations aim to benefit consumers by addressing the potential risk of:

- Consumers paying more than they should for direct control services because a DNSP chooses to cross-subsidise the cost of its unregulated services by attributing costs to its direct control services; and

[1] United Energy, *Ring-fencing Waiver Application*, 12 October 2020.

- DNSPs discriminating in contestable markets in favour of their affiliated entities, thereby diminishing the benefits created by a competitive market, such as downward pressure on prices in the long-term and greater consumer choice.

Ring-fencing aims to drive effective competition where feasible, open up new markets to competition and provide effective regulation where competition is unattainable.

The Guideline recognises that strict adherence to the obligations might, in some circumstances, result in outcomes that are not in the interest of consumers. This is why the Guideline makes provision for ring-fencing waivers. Waivers provide the ring-fencing framework with the flexibility to support opportunities for genuine innovation.

Under clause 5.3.1 of the Guideline, the AER must consider a DNSP's ring-fencing waiver application and may:

- Grant the waiver subject to any conditions the AER considers appropriate; or
- Grant the waiver as an interim waiver subject to any conditions the AER considers appropriate; or
- Refuse to grant the waiver.

A DNSP may apply to the AER for a waiver in regard to a number of aspects of the Guideline.

2 Waiver application

United Energy proposes a trial involving the purchase of 40 new pole-mounted BESS units. These units, in addition to two existing pilot BESS units, will be installed in the low voltage network. The BESS units will principally be used to provide network support through the absorption and supply of reactive power, and phase balancing.[2]

When the BESS units are not being used to provide distribution services, United Energy will lease their storage capacity to an unaffiliated retailer partner. United Energy's retailer partner will use the BESS units to provide frequency control ancillary services (**FCAS**) and to trade on the energy market, charging the BESS units during periods of low demand and selling the excess energy when prices rise during periods of high demand.

To assist in funding the trial, United Energy has sought funding from the Australian Renewable Energy Agency (**ARENA**). In order to be eligible for ARENA funding, United Energy (as well as its retailer partner) must agree to publicly share knowledge and information about the trial pursuant to knowledge sharing plans.

United Energy stated the purpose of its waiver application is to allow it to undertake a trial. United Energy's waiver application focusses on its legal separation obligation under clause 3.1(b) of the Guideline. This obligation states a DNSP may provide distribution services and transmission services but must not provide other services. United Energy proposes that the waiver extend to the end of its next regulatory control period, being 30 June 2026.

In its waiver application, United Energy raised the fact that clause 3.1(d)i. of the Guideline appears to allow it to grant its retailer partner the right to use the BESS units in providing other services. Clause 3.1(d)i. of the Guideline states that a DNSP is not prevented from:

- 'granting another legal entity the right to use assets of the DNSP in providing transmission services, distribution services or other services, where those assets are also used by the DNSP to provide distribution services or other services, but only where doing so does not materially prejudice the provision of direct control services by the DNSP.'

The intention of this clause was to facilitate the 'shared asset' rules introduced in 2012. The shared asset rules apply to assets that already form part of the regulated asset base (**RAB**) and are being paid for by consumers of distribution services.

In United Energy's case, the BESS units proposed for the trial are not pre-existing assets *within* the RAB. Thus, it is not entirely clear whether clause 3.1(d)i. of the Guideline applies to those assets. We intend to consider the appropriate scope of clause 3.1(d)i. through our Guideline review, which is currently underway. Our recently

[2] Phase balancing in this instance refers to charging or discharging a BESS unit to balance the load on the phases.

published Guideline issues paper seeks stakeholder submissions on the treatment of storage devices in relation to ring-fencing compliance obligations.[3]

[3] AER, *Updating the Ring-fencing Guidelines for Stand-Alone Power Systems and Energy Storage Devices – Issues Paper*, 20 November 2020.

3 Assessment

Clause 5.3.2 of the Guideline states that, in assessing a waiver application and deciding whether to grant a waiver (subject to any conditions) or refuse to grant a waiver, we must have regard to:

- The National Electricity Objective (**NEO**);
- The potential for cross-subsidisation and discrimination if the waiver is granted or refused; and
- Whether the benefit, or likely benefit, to electricity consumers of the DNSP complying with the obligations (including any benefit or likely benefit from increased competition) would be outweighed by the cost to the DNSP of complying with that obligation.

In assessing United Energy's ring-fencing waiver application we have considered each factor listed above, as well as feedback from submissions as outlined in section 3.1 below. We have also had regard to any additional matters that we consider relevant to our assessment of the waiver application.[4]

3.1 Stakeholder views

On 16 October 2020, we sought submissions from interested stakeholders on United Energy's ring-fencing waiver application by 6 November 2020. We received seven submissions on the application, with two of these being submitted on a confidential basis.[5]

Ausgrid, Energy Networks Australia (**ENA**) and the Energy Users Association of Australia (**EUAA**) were supportive of United Energy's ring-fencing waiver application. ENA noted that the knowledge sharing obligations stemming from the ARENA partnership will ensure that the broader industry (and consumers beyond those connected to United Energy's network) also benefits from the trial.[6] The EUAA stated that, while its members are taking advantage of technological developments, it is important that networks have the opportunity to trial innovative approaches to efficiently manage the surging levels of distributed generation that are being introduced into the distribution system.[7]

While Ausgrid supports United Energy's ring-fencing waiver application, it considers that a waiver of functional separation requirements should also be granted by the AER.[8] Ausgrid stated that the 'right of access' service being provided by United Energy as part of the trial is being provided by 'means of, or in connection with a distribution system' and is therefore a distribution service.[9] However, according to Ausgrid,

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[4] AER, *Ring-fencing Guideline Electricity Distribution – Version 2*, October 2017, cl 5.3.2(b)i.

[5] The five public submissions can be viewed on the AER's website here: <https://www.aer.gov.au/networks-pipelines/ring-fencing/ring-fencing-waivers/united-energy-ring-fencing-waiver-october-2020/initiation>.

[6] Energy Networks Australia, *United Energy Ring-fencing Waiver Application Submission*, 26 October 2020.

[7] Energy Users Association of Australia, *United Energy Ring-fencing Waiver Application Submission*, 11 November 2020.

[8] Ausgrid, *United Energy Ring-fencing Waiver Application Submission*, 6 November 2020.

[9] *National Electricity Rules*, chapter 10 glossary.

because this new service has not yet been classified by the AER, it will ultimately be a 'contestable electricity service'[10] and therefore subject to functional separation obligations under clause 4 of the Guideline.

We note that we do not agree with Ausgrid's characterisations of the 'right of use' service. In our view, the 'right of use' service is not a distribution service, as the right of use does not involve use of the BESS units to convey or control the conveyance of electricity. However, this issue is not determinative of whether clause 4 of the Guideline applies to this service.

United Energy has not sought a waiver of any of its obligations under clause 4 of the Guideline. Accordingly, we are unable to consider or grant such a waiver.

The Australian Energy Council's (**AEC**) submission raised issues in relation to the risk of cross-subsidisation.[11] It stated that if United Energy was able to place BESS units on a part of the network that gave them significant benefits, it would have the ability to significantly cross-subsidise and offer battery rental storage cheaply. The AEC therefore supports the use of a retailer partner, rather than a ring-fenced affiliate, as outlined in United Energy's ring-fencing waiver application.

Red Energy and Lumo Energy considered United Energy's application fails to satisfy the Guideline.[12] In particular, Red Energy and Lumo Energy stated the only two circumstances in which a waiver of legal separation obligations will be granted is where:

- The services provided by a DNSP are also regulated services; or
- The other services are services that the DNSP is required by law to provide.[13]

We do not agree that these are the only two circumstances in which a waiver will be granted. Our 2016 Explanatory Statement explains that we are likely to grant a waiver in these circumstances, but that we will assess each waiver application on its merits.[14] These circumstances are not exhaustive of situations where a waiver may be granted.

Red Energy and Lumo Energy also raised concerns regarding the long-term interest of consumers and the risk of cross subsidisation. We have addressed each of these issues in sections 3.2 and 3.3.1 respectively below.

One of the confidential submissions was supportive of United Energy's ring-fencing waiver application as it sees the trial as an innovative approach to exploring the potential of battery energy storage. The other confidential submission raised concerns with United Energy's proposed trial and waiver application. In particular, it raised concerns with United Energy's intention to lease the BESS units to a third party. It expressed the view that allowing a network Service Provider (**NSP**) to earn revenue from such an arrangement with a third party may create an unintended and unfair barrier for independent companies seeking to compete with NSPs.

[10] AER, *Ring-fencing Guideline Electricity Distribution – Version 2*, October 2017, cl 2.

[11] Australian Energy Council, *United Energy Ring-fencing Waiver Application Submission*, 6 November 2020.

[12] Red Energy and Lumo Energy, *United Energy Ring-fencing Waiver Application Submission*, 17 November 2020.

[13] AER, *Electricity Distribution Ring-fencing Guideline Explanatory Statement*, November 2016, p 55.

[14] AER, *Electricity Distribution Ring-fencing Guideline Explanatory Statement*, November 2016, p 55.

3.2 National Electricity Objective

United Energy provided the following reasons why granting its ring-fencing waiver application would promote the NEO:

- The BESS units will provide an opportunity to demonstrate 'value stacking' to deliver the greatest benefit to customers by utilising a single device to provide a number of different services, including regulated and unregulated services. This should offset some of the cost of the BESS units, and deliver lower cost outcomes for consumers;[15] and
- The waiver is likely to promote the long-term interests of consumers beyond the trial as it will allow for a path of commercialisation of grid connected batteries, including potentially paving the way for mass production of BESS units which will decrease the cost associated with these units.

We agree with United Energy that, for these reasons, the trial is in the long-term interests of consumers and would promote the NEO. We also agree with ENA's submission that the knowledge sharing obligations required by ARENA for funding are particularly important. In our view, consumers will benefit most from the trial where the information and knowledge gained is shared with the broader industry. We therefore consider one of the main purposes of the trial is to gain a better understanding of the potential long-term benefits to consumers from BESS unit technology. In turn, this is likely to inform our consideration of how this technology should be treated under the ring-fencing framework moving forward.

Of course, in the circumstance where a DNSP applied for a waiver to deploy BESS units on a commercial basis, we would expect to see a clearer analysis of the benefits to consumers from the use of the BESS units for network purposes, and separately, from the use of the BESS units for any other purposes, to ensure an appropriate allocation of costs.

3.3 Benefits to customers from United Energy complying with its legal separation obligation

Our view is that, in this instance, there would be little, if any, benefit to consumers from requiring United Energy to comply with its legal separation obligations as set out in the Guideline. The Guideline aims to benefit consumers by addressing the potential risk of:

- DNSPs cross-subsidising non-distribution services with revenue earned from their provision of distribution services; and
- DNSPs discriminating in contestable markets in favour of their affiliated entities providing contestable electricity services.

We consider there is no risk of United Energy discriminating in favour of an affiliated entity if its waiver application is approved. This is because the waiver only relates to a

[15] 'Value stacking' in this instance refers to using the BESS units to provide multiple services across the electricity supply chain, using a single storage device which may include regulated and unregulated services.

trial project (and is thereby limited in scope), that only involves a retailer partner who is not an affiliate of United Energy.

3.3.1 Cross-subsidy

In the case of this particular trial, we consider that the risk the trial might involve a cross-subsidy by the DNSP of the retailer's services is adequately controlled by United Energy's ring-fencing obligations in relation to establishing and maintaining separate accounts.[16]

The waiver that United Energy has sought, and that we have decided to grant, is only for the particular approach to the trial as described in United Energy's application. In its application, United Energy identified the categories of expected costs that it will incur in conducting the trial, and quantified each of those categories. It also set out its approach to cost allocation between itself and its retailer partner.[17] On the basis of these expected costs and approach to cost allocation, including ARENA's contribution (without which the trial will not proceed), we are satisfied that the trial arrangements that are the subject of the waiver, combined with the requirements to establish and maintain separate accounts, will control the risk of cross-subsidy. United Energy will be required to report on its expenditure for this trial as part of its annual reporting obligations, which are subject to an audit process.

In its application, United Energy has also stated that the residual costs of conducting the trial will be included in the RAB. In general, we would not support this approach. Instead, we consider an approach which allocates costs based on the usage or expected benefit of the assets to be more appropriate. However, given the purpose, small scale and relatively low cost of the trial, we consider that United Energy's proposed approach is acceptable in this instance.

Overall, given the waiver is limited to United Energy's proposed trial, we consider the risk of cross-subsidisation is adequately addressed. As United Energy has acknowledged, any future installation of BESS units on United Energy's network would be subject to consideration under the regulatory framework applicable at that time. This would include re-consideration of the potential for cross-subsidisation.

3.4 Cost of compliance to United Energy

United Energy states its trial would not be able to proceed without a waiver. It also states that, if the trial were not to proceed, United Energy would still incur costs in the form of network augmentation costs. Therefore, while there is not a high cost of compliance for United Energy to comply with its legal separation obligations, there is a potentially high opportunity cost to the broader industry and consumers if the trial does not proceed.[18] This is an additional matter that we consider relevant to our assessment of the waiver application.[19]

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[16] AER, *Ring-fencing Guideline Electricity Distribution – Version 2*, October 2017, cl 3.2.2.

[17] We note in United Energy's application, it states the payment from the retailer to United Energy will be commercially negotiated and set out in a contract.

[18] United Energy, *Ring-fencing Waiver Application*, 12 October 2020, p 12.

[19] AER, *Ring-fencing Guideline Electricity Distribution – Version 2*, October 2017, cl 5.3.2(b)i.

3.5 Conclusion

Based on the trial as outlined by United Energy in its application, we consider that the trial would promote the NEO, that the costs and benefits of requiring compliance with the legal separation obligation in this instance are both very low, and that there is potentially a high opportunity cost to the broader industry, and to consumers, if the trial does not proceed.

We are satisfied the risks of cross-subsidisation and potentially discriminatory behaviour that ring-fencing aims to prevent are either adequately accounted for, or do not arise, in this situation. We also recognise the potential benefits of the trial, both for consumers in delivering potential cost savings and in supporting innovation within a dynamic and evolving market.

4 Decision

We grant United Energy a waiver from its obligation to comply with clause 3.1(b) of the Guideline in respect to United Energy leasing the storage capacity of pole-mounted battery units to a retailer partner, as part of the trial project described in its ring-fencing waiver application, from 4 December 2020 to 30 June 2026.