Draft electricity distribution ring-fencing guideline

CitiPower, Powercor and United Energy

Submission to the Australian Energy Regulator

CitiPower, Powercor and United Energy

NON-CONFIDENTIAL VERSION

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Mr Mark Feather
General Manager
Australian Energy Regulator
GPO Box 520
Melbourne, Victoria, 3001

By email: AERInquiry@aer.gov.au

Dear Mark

Re: Draft electricity distribution ring-fencing guideline

CitiPower, Powercor and United Energy welcome the opportunity to contribute to the Australian Energy Regulator's (AER) draft electricity distribution ring-fencing guideline (draft guideline).

The energy market is rapidly transforming towards more distributed energy resources (DER). It is critical that the regulatory framework governing our industry evolves to reflect these changes to ensure maximum benefits for customers are fully realised.

Electricity distributors are already demonstrating they can successfully deliver broad benefits for customers through investment in innovative technology such as energy storage. Within the United Energy network, our Bayside Battery pole-top trial of two batteries is already:

- supporting reliability of electricity supply in the community, particularly during peak demand times
- increasing the network capacity to allow more homes to connect and export from rooftop solar systems
- improving the quality of electricity supplied by our distribution network
- helping reduce network charges for customers by avoiding traditional network upgrades that might otherwise be required.

Energy storage will be a key supporting technology for renewables growth on the network and rapid deployment is highly sought after by our communities and the government. We are already experiencing strong community and government interest in the development of storage in our local distributed areas, particularly to enable more DER.

To support our communities, we have submitted applications for five 'shovel-ready' projects for funding to the Victorian Government's Neighbourhood Battery Initiative. These projects are in partnerships with community energy groups such as the Yarra Energy Foundation as well as electricity retailers, to deliver innovative storage options that will provide not just individual benefits but benefits for the whole community and customer base. However, under the current guidelines, these projects require waivers that are complex and lengthy, provide no guarantee planned investment can go ahead, and ultimately delay highly anticipated benefits to Victorian consumers and communities.

We are concerned with the content and direction of the draft guideline, and believe it does not align with its scope and objective. Preventing or limiting distributors participating in new and emerging markets is not in the long-term interest of consumers.

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The AER has stated there is a *perception* a distributor may leverage their market power and access to information to dominate the energy storage market. There is no evidence that distributors are causing market failure or exhibiting anti-competitive behaviour. Given this perception, the AER's draft guideline overreaches its purpose and intent by:

- determining the technologies that distributors may or may not use in the provision of distribution services
- creating technology-specific ring-fencing obligations that impede the development, and use of those technologies, for the provision of distribution services
- duplicating and extending the role of other more appropriate regulatory instruments, such as the Competition and Consumer Act 2010 (Cth) or the Shared Asset Guideline, or seeking to impose ex ante regulation in the absence of a clear market definition or market failure.

A future of a continuously evolving set of ring-fencing obligations that seek to eliminate technologies from distributors every time their application can extend beyond distribution services to contestable markets is not in the best interests of customers in terms of the affordability and quality of distribution services they receive. A fulsome review by the Productivity Commission should be completed before stringent conditions are imposed on players in these markets.

In this submission, we:

- present the case for the role for distributors in energy storage, drawing on experience from overseas markets, the meter contestability 'experiment', and the views of our Customer Advisory Panel
- demonstrate the benefits of partnerships between distributors and community groups or third parties, as the most pragmatic solution that delivers value to customers while allowing each party to best utilise their expertise and share the learnings. We highlight our existing partnerships and the very high level of support and demand for partnerships from many other community groups
- outline our concerns with the increasing regulatory overreach through the use of the guideline, and how this will ultimate cost consumers through reduced productivity and halting of innovative projects
- provide responses to perceptions of distributors leveraging market power, including through the regulatory information test for distribution (RIT-D) process, and provide evidence to demonstrate the perceived misconduct is based on market factors that are outside of the control of the distributor
- recommend a streamlined waiver process with clear information sharing requirements to provide confidence to customers and stakeholders that distributors are fairly participating in new and emerging markets, in contrast to the convoluted waiver process.

Should you have any queries about this submission please do not hesitate to contact Sonja Lekovic on 0418 166 169 or slekovic@powercor.com.au.

Yours sincerely,

Renate Vogt
General Manager Regulation
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1 Distributors will assist energy storage development

Local communities and governments are already seeking us to directly invest in energy storage in their communities, and as we begin to undertake our first trial of this technology through a partnership with a retailer. However, the need to continually seek waivers for us to participate in these projects that will clearly provide customer benefits are hampering this work.

Whether we are prohibited from investing in energy storage, or required to undertake lengthy waiver processes, deployment risk is being increased and distributors incentivised to reduce, or eliminate, investment in energy storage viability is being undermined. Whilst no one can say how an infant industry like energy storage will evolve in the absence of AER intervention, it is concerning that now when action and deployment is most needed to deploy sufficient energy storage onto the grid to facilitate the transition to renewable energy, we have increased uncertainty.

1.1 Australia is ahead of the curve in energy storage use

While the current ring-fencing guideline allows distributors to own energy storage, the AER's recent statements and reference to the European energy storage markets warrant further consideration.

In response, we have been engaging with distributors and other parties across France, the United Kingdom and Germany to understand how the market for energy storage has developed in these countries given the prohibition on distributor led solutions. This will form part of an independent report on the European markets, which we will submit to the AER when complete in late July.

Our early findings, as supported by IHS Markit, demonstrate the following:[1]

- the only significant grid-connected energy storage has so far been in Germany and the United Kingdom, with other European countries lagging significantly with almost no storage market. Of the storage in Germany and the United Kingdom, there are no batteries connected to the distribution LV network
- highly lucrative frequency regulation markets were the core driver of early large-scale energy storage in Germany and the United Kingdom. Initial returns on frequency markets have been around $220,000 per MW per annum, in comparison to around $60,000 per MW per annum in Australia
- this means the size, type and location of energy storage has been optimised for frequency regulation revenue. For example, energy storage seeking to optimise frequency response is typically fast charging and not to their full capacity, to avoid network charges. However, to provide reliable network services, energy storage would typically have to fully charged
- despite developed flexibility markets in the United Kingdom, there are no distributed energy storage solutions providing services in those markets. Flexibility markets in other countries are far behind Australia—the European Union has only recently brought into legislation the requirement for distributors to share constraint data with third parties and develop flexibility markets
- due to the use of energy storage for frequency markets alone, the fast and frequent charging of the energy storage has created new challenges for the networks, which has led to prohibition of energy storage devices greater than 4MW on the distribution network in France
- there is no contemplation of using energy storage to improve solar hosting on the distribution network or to provide storage services to local customers and communities. This has led to almost no batteries on the LV distribution network, with all batteries connecting to higher voltages and in larger sizes.

[1] https://ihsmarkit.com/research-analysis/as-frequency-regulation-markets-across-europe-saturate-new-ins.html

It is clear from our discussion with Europe network providers that Australia is well ahead of the curve regarding the application of energy storage to multiple benefit streams, including network, customer and wholesale benefits. This is particularly true for smaller-scale energy storage, for which the market did not develop at all in continental Europe and the United Kingdom. Australian customers can benefit from solutions that do not allow energy storage to remain idle for long periods of time, or they can face the situation in Europe where large market participants have capitalised on lucrative frequency markets, whilst customers have funded network upgrades to support their largesse.

Should the AER choose to mirror European regulatory arrangements, it should expect a decline in energy storage activity and rewinding of the progress we have already made regarding unlocking the full value stack of energy storage.

1.2 Smaller grid-scale battery markets are more suited to distributor-led models

It would be incorrect to assume a third-party experienced in managing a 20MW energy storage device will have the required knowledge, capabilities and commercial interest in operating a 300kW battery. Despite energy storage being a contestable service, there are fewer than five energy storage devices smaller than 1MW installed at grid-scale in the NEM. Of those five, almost all are partially-owned and operated by distributors.

There is no prohibition on third parties investing in those solutions—distributors are obliged by the law to provide relevant data and information to third parties to assist them in constructing their business cases and connect them to the grid. Yet, we see little investment from third parties in smaller energy storage.

Whilst supporters of ring-fencing regulation may say this demonstrates anti-competitive behaviour, we believe it is related to more 'real life' issues such as:

- land availability—energy storage most often needs to be placed on council land, gaining access to which can be difficult
- distribution charges—unlike larger connections, there is no negotiation of distribution charges for smaller energy storage as per the AER's approved tariff structure statement (TSS). This contrasts with the AER's framework for transmission, where use of system is free for energy storage
- revenue streams—smaller energy storage devices are not recognised as being capable of providing wholesale/ancillary market services by AEMO's market participant registration framework. A contrast again with transmission connected energy storage. Additionally, to participate in Frequency Control Ancillary Services (FCAS), all storage below 1MW would have to be aggregated to at least 1MW, which requires multiple storage units by the same owner
- asset management—operating and maintaining small electrical assets is a major obligation in terms of meeting legislated safety and reliability requirements. Third parties, such as community groups or retailers, are likely to be reluctant to take on these extensive compliance obligations.

1.2.1 Distributors can deliver least cost solutions that deliver customer benefits

Distributors can overcome some of these issues. Distributors may have land available located in, and around, zone substations in which to locate energy storage devices or attach them to existing assets, such as poles. Distributors are experienced managing large volumes of small electrical assets in a safe and reliable manner. Finally, they have scale in managing these assets along with other electrical assets across the distribution system. These advantages arise from economies of scope and scale.

Our submission to the AER's issues paper on 21 December 2021, we outline how customers benefits from distributor-led grids scale story. We have provided further arguments for the differences in costs and benefits between distributors and third parties in Appendix A.

Ultimately, distributors are in a strong and unique position to implement battery systems on the distribution network to provide the lowest cost and best outcomes for customers. Distributors' commercial interest is in energy storage's potential for managing the network in the most cost effective manner. This includes the management of 'real life' operational challenges such as maximum and minimum demand, solar hosting, voltage management, reducing outages, providing system strength, and many more potential use cases that are still to be discovered. And as battery costs reduce and market services mature, these benefits will flow exclusively to customers.

In finding the most cost effective solution, distributors network augmentation options against internal and third-party non-network options that may involve energy storage. We are obliged to select the lowest cost option to deliver the best outcome for customers. Preventing distributors from providing battery systems will likely remove the lowest cost non-network option in many circumstances in the future. Ultimately customer would therefore pay more for the same outcomes.

1.3 Why scale and scope offered by distributors can matter

There are parallels with the Australian Energy Market Commission's (AEMC) view of distributors role in metering services. Metering competition was introduced in 2017 (except for Victoria), as part of the Power of Choice reforms. In contrast, Victorian metering arrangements derogated from the Power of Choice reforms and required distributors to roll-out smart meters. Contrasting smart meter outcomes between Victoria and the rest of Australia, Victorian customers have extracted millions in reduced network tariffs and service delivery improvements from distributor-owned smart meter infrastructure compared to the ineffective and substandard roll-out experienced by customers in other states.

Victorian distributors have been optimising the use of smart meter infrastructure for more than a decade. The universal coverage and smarter meter specification have allowed Victorian distributors to find more innovative and cost-effective ways to manage the network. This has translated into our three businesses having the lowest network charges in the country for rural and urban customers and the highest reliability. Why did this occur? It occurred because of the Victorian Government's foresight to allow time for research and development to occur to optimise the value of smart meters infrastructure for customers.

Victorian customers are again poised to benefit through the ability of Victorian networks to have the visibility and capability to manage the LV network to facilitate the Post 2025 NEM. This will not be the case for other states, who will need to rely on more 'agricultural' methods to enable the energy transition whilst they continue to wait for LV capabilities that are unlikely to ever be delivered under the current regulatory framework. This will be especially true for customers in rural areas, typically ignored by third parties.

1.4 Our Customer Advisory Panel (CAP) support distributor-led storage solutions

We have extensively discussed energy storage with our Customer Advisory Panel (CAP).

They support us having a role in ensuring energy storage on the network is operated maintained and managed appropriately. They also felt us partnering with community groups and retailers would be a real demonstration of a united approach to unlocking customer values and would provide a valuable alternative to first tier retailer options.

We agree with our CAP and believe the focus should be on encouraging a rapid deployment of energy storage, ensuring customers benefits are more widespread and making sure rents are not captured by other market participants at customers' expense.

Our CAP's feedback on community batteries and distributors' role

- Distributors have the best experience and capabilities to undertake this work. This includes operating and maintaining the asset to a safe and reliable standard
- There was overall support for distributors playing a role in energy storage; some members felt distributors should be the only providers of this service, and the cost of the service should be shared across all customers as over time, the benefits would be shared as well as more batteries are rolled out across the network
- The CAP encouraged us to think of the story 20 years from now when energy storage is located across our entire network, and that the most logical approach is to have a single party maintain, manage and operate energy storage in a coordinated manner to maximise economies of scale
- There was concern that if energy storage wasn't more socialised across all customers, the investment in energy storage may benefit only a small number of customers—if this is the case, distributors should ensure that the private benefit is only enabled by private cost
- If not owning energy storage, distributors should at least be operating it. This would socialise the costs and socialise the benefits, instead of socialising the costs and individualising the benefits
- Given energy storage is not yet financially viable based on a single value stream, the CAP recommends discussing with the Victorian Government ways to 'fast track' the roll out of energy storage to ensure the highest benefits are generated through scale
- The CAP are highly supportive of initiatives where industry participants are able to partner and demonstrate a common goal towards improving customer outcomes.

CAP members:

- Gavin Dufty, Executive Manger Policy and Research, St Vincent de Paul Society Victoria
- Tennant Reed, Head of Climate, Energy and Environment Policy, Australian Industry Group (Ai Group)
- Natalie Collard, Chief Executive Officer, Food and Fibre Great South Coast
- Emma Chessell, Project Manager, Climate Change and Energy, Brotherhood of St Laurence
- Dean Lombard, Policy and Research Manager, the Renew.

2 Partnerships are a pragmatic solution

Our experience with LV energy storage is customers, communities and retailers wish us to own, operate and maintain energy storage devices and partner with them to unlock benefit streams. Our stakeholders put faith in our experience, scale and expertise in managing electrical assets and see value in the usually dispersed industry players working together to maximise customer benefits.

Below we give examples and evidence of the existing partnerships we are part of, and demand for further partnerships with community groups and retailers. We have partnered with different groups regardless of the ownership structure of the battery, as all opportunities to participate in energy storage are beneficial to our customers. This includes either enabling a third-party solution by working closely with them to provide necessary data and network specifics for their business case, or taking on that role for the parties that are not interested in owning batteries or providing network services, rather just leasing the asset for their purposes.

Partnerships are also beneficial for all customers as there are situations where distributors owning energy storage can foster retail competition in the energy storage market, rather than leaving the market to large incumbent retailers that will own and operate energy storage assets. It is unlikely a first-tier retailer will lease out capacity on their energy storage device to a second-tier retailer as there is no evidence of a similar arrangement in the NEM today. However, distributor solutions are agnostic to the retailer and will always result in the most appropriate leasing arrangement though a competitive tender.

2.1 Our proposed partnership with a retailer on community batteries

We have developed trialling energy storage value stacking through a partnership with a retailer as part of our various battery projects, including our most recent applications to the Victorian Government's Neighbourhood Battery Initiative. Such proposed trials will allow us to demonstrate how distributors and retailers can work together to provide a safe and reliable network services from the battery, while using the battery for the remainder of the time to provide services into the wholesale market. This work has leveraged our insights on United Energy's two trial pole-top batteries in Melbourne's Bayside area.

All of our current and proposed future trials are demonstrating that distributors and retailers can work together effectively to negotiate and share risks and responsibilities in line with their expertise. (It should also be noted that not all our LV battery projects have been publicly announced at the time of writing this submission).

Our trials are also providing important learnings regarding registration requirements for small batteries for participation in ancillary services markets in the NEM, the IT system requirements for the systems of different participants to work together well, and the intricacies of optimisation of battery use and value stacking.

As the first of its kind in Australia, the United Energy pole top energy storage trial has cleared the road for many future participants in the market for pole top batteries, which would not have been possible or probable without distributor expertise and involvement.

Our partnership with Yarra Energy Foundation and Australian National University

We have entered a partnership with Yarra Energy Foundation (YEF)[2] and the Australian National University (ANU)[3] to work together on a trial of energy solutions in the CitiPower network, where the battery is owned and operated by the community consortium that plans to roll-out batteries across multiple locations in our network. Under this arrangement, we would purchase network services from the battery when that is the least costly solution to manage a network constraint. We are also trialling a local use of system (LUOS) tariff for this battery, which is the first trial of this tariff in Australia.

Our partnership demonstrates an operational model whereby community groups such as YEF can work closely with distributors to work on a solution that facilitates the growth of renewable DERs in the network whilst minimising overall network costs. We have been working closely with YEF to identify areas of network constraints to ensure they can get the most value out of their investment. It is in our interest and the interest of our customers that we enable all viable solutions that can provide safe, reliable, and affordable electricity to our customers.

CitiPower, Powercor, United Energy and YEF have also put in a joint submission to the guideline review.

Community support for distributor involvement in energy storage

Since the Victorian Government announced its Neighbourhood Battery Initiative, we have proposed several potential sites for community batteries across our network. These would be rolled out as partnerships with community groups and/or retailers. We have also partnered with the community groups below on an application to lead a larger feasibility study for the most suitable battery opportunities, highlighting our willingness to collaborate and support third-party deployment of community batteries. We expect that many feasibility studies will be completed over the next 12 months and this will create the environment for many 'shovel ready' community projects to be delivered within the next 2 years.

Community groups we have agreed to support develop community battery projects under the NBI:

Melbourne City Council (City of Melbourne)
Geelong Sustainability
Mornington Peninsula Shire
Apollo Bay Chamber of Commerce
Hobsons Bay City Council
Macedon Ranges Sustainability Group
[✂]
Bayside City Council
Manningham City Council
Southern Otways Sustainable
Bendigo Sustainability Group
Moreland City Council
Eastern Alliance for Greenhouse Action

[2] See https://www.powercor.com.au/news/citipower-and-yarra-energy-foundation-pursue-victorian-first-solar-sponge-community-battery-network

[3] See https://www.yef.org.au/our-stories-and-events/anu-to-develop-software-for-melbournes-solar-sponge-community-battery-trial/

3 Refocusing the guideline

The draft guideline does not align with the Australian Energy Regulator's (AER) original purpose and intent of ring-fencing.

The AER's draft position on ring-fencing of batteries is that distributors are prohibited from providing contestable services with a battery (whether the service consists of the supply of excess capacity to third parties, or the provision of other contestable services themselves with the battery).[4]

Ring-fencing is the identification and separation of a distributors monopoly business activities, costs, revenues and decision making from those associated with providing services in contestable markets.[5] It does not extend to eliminating distributors as potential competitors to new or emerging markets or:

- determining the technologies that distributors may use in the provision of distribution services or as part of their distribution network
- creating technology specific ring-fencing obligations that impede the development and use of those technologies for the provision of distribution services
- duplicating and extending beyond the application of other legal and regulatory instruments such as the Competition and Consumer Act 2010 (Cth) (CCA) or the Shared Asset Guideline.

We are concerned with the use of the guideline for regulation of energy storage (and any such technologies), that are beyond the original intent of the guideline. We are also concerned with a potential trend to keep evolving the guideline for each new technology, which will set it further away from its objective and scope each time. A future of a continuously evolving set of ring fencing obligations that seek to eliminate technologies every time their application can extend beyond distribution services is not in the best interests for end-user customers in terms of the quality and affordability of the distribution services they receive, and for generators in terms of the network support needed to maintain their exports to the grid.

3.1 Is there a problem?

Ring-fencing usually focuses on the separation of a distributors' regulated monopoly services from the contestable services its related electricity service providers offer to contestable markets. However, the AER's draft position extends beyond affiliated entities to all third parties.

The AER appears to consider this prohibition (except where waivers are granted) would guard against the potential threat to competition in these emerging markets. The AER's concerns are based on perceptions, without evidence to support the need for regulation of a distributor's conduct.

The CCA is the appropriate regulatory tool for regulation of competitive markets, and it does not contain a *per se* prohibition on the existence or internal development of natural monopoly or significant market power. Further, as contemplated by the CCA, any sort of analysis of the impact of specific market structures or conduct on competition should include:

- an assessment of the market in which energy storage is supplied before regulation is applied
- defining clear boundaries for the relevant product or service market
- an analysis within that market to determine if a market player possesses significant market power.

Without a market analysis and evidence of market failure, the AER appears to have jumped to a conclusion that:

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4 AER, Draft electricity distribution ring-fencing guideline (version 3), explanatory statement, May 2021, p. 30.

5 AER, Electricity distribution ring-fencing guideline, Explanatory statement, November 2016, p. 11.

- distributors have a sufficient level of market power in such competitive markets or that there is material market failure to justify *ex ante* regulation
- that market failure is caused, or likely to be caused, by cross subsidisation or discrimination by distributors in the provision of direct control services.

Further, within the competition analysis, an independent assessment of energy storage would typically consider issues such as:

- whether prospects of competition are the same across different energy storage solutions and sizes
- given the widespread topography across the National Electricity Market (NEM), whether prospects of competition are tied to specific locations (i.e. densely populated urban areas) and if there is any appetite for competition in remote or rural areas.

It is possible the prospects of competition depend on the size of the energy storage device. Certainly, this is the experience internationally where interest has focused on the high voltage network urban areas. However, no assessments of those differences have been sought, or references made to evidence in other markets, such as metering (other than Victoria) that clearly demonstrate rural and remote customers are completely left behind.

Without evidence to support imposing ex ante regulation on the market for energy storage, we recommend a scope for an inquiry of the relevant markets by the Productivity Commission and the adequacy of existing competition laws in that context. Such a review would look closely at many of the concerns identified in our submission and provide the opportunity for all stakeholders to participate in a transparent public hearing process based on evidence rather than presumption and perception

3.2 How is energy storage any different to other network assets?

The AER states energy storage in the form of batteries is 'perfect for multiple uses', but then specifies in the draft guideline that energy storage cannot be shareable (through updates to clause 3.1(b)).

The difference between other distribution assets shared with contestable markets and energy storage is difficult to fathom. Batteries are no different to a multiplicity of network assets that are capable of being shared with third parties including poles, communications, ducts, property, land, information technology, etc.

Where there are commercial opportunities to share these assets, the winner is customers who benefit through a third party contributing to the value of the asset, ultimately reducing energy bills. This policy decision was debated and agreed back in 2013 with the introduction of the Shared Asset Guideline, and then affirmed again in 2016 in the current exception to legal separation in clause 3.1(d)(i) of the guideline which was always intended to permit this type of arrangement.

We therefore oppose the updates to clause 3.1(b) of the guideline and consider it regulatory overreach to stipulate specific technologies as shareable or non-shareable network assets.

3.3 Inhibiting productivity and innovation in the sector

The AER's position on energy storage will be detrimental to the future development of energy storage technology—or in fact any distribution related technology. Australian distributors are the only party investing in research and development (R&D) into energy storage on the low voltage (LV) network. This investment, if allowed, will lead to a reduction in the costs of energy storage and assist other market participants to identify, and develop, future benefit cases.

The AER's draft guideline is threatening the future of existing trials and the viability of further R&D investment. We are aware other parties have advised the AER they are 'thinking' of investing in energy storage or might like

to do so in five years. While this is welcomed, this should not stop the investment today that is going to benefit customers.

The consequences for R&D however extend beyond energy storage. The regulatory framework under which distributors operate apparently favours cost reduction over dynamic efficiencies. The prospect of future distribution service R&D possibly having application in contestable markets and subsequently being prohibited under ring-fencing arrangements should be a concern. Any ability to stimulate and drive R&D should be welcomed as it will deliver affordability and better service offerings for distribution customers, as well as new solutions required to facilitate the post 2025 NEM.

The AER proposed barrier to entry, caused by the discretionary waiver process, will introduce uncertainty that will thwart investment and the development of business partnerships, due to the risks involved and the costs and time required before an idea or project can even get to the maturity required to apply for a waiver.

3.4 Prohibition on distributor's owning and operating energy storage is an extreme measure

Since publication of the draft guideline, it is understood the AER Board is considering further amending the draft guideline to prohibit distributor's owning or operating energy storage. This is a significant shift in direction, which extends discussion beyond ring-fencing to intentions the AER may have to regulate any future technologies distributors may choose to own or operate to provide distribution services that may also have application in other markets.

We strongly object to network asset ownership prohibitions for the purpose of providing distribution services. Distributors can, and should seek, to continuously innovate through consideration of new technologies. The incentive framework under which distributors operate is intended to be technology-neutral ensuring innovative investments are only made when efficient to do so (unless part of incentivised R&D). Prohibition is an extreme overreach, that serves to eliminate future improvements in productivity and service delivery impacting the affordability, reliability and service experience of distribution customers.

4 Safeguards already exist

The explanatory statement refers to a *perception* a distributor may leverage their market power and access to information to dominate the energy storage market. No evidence has been cited to substantiate these perceptions.

Indeed, it is possible to propose another *perception* that larger players in the retail energy markets will use the elimination of distributors and smaller retailers from energy storage markets to create barriers to switching in competitive retail markets.

4.1 Perceptions are unfounded

Below we address each of the perceptions raised by the AER and larger retailers.

Perception 1: we will block the connection of third-party energy storage devices

We are required to make connection offers to those requesting a connection to the network. Any concerns with a distributor's connection arrangements should be addressed through the connection policy approval process at each regulatory determination or through a subsequent complaints process managed by the AER.

It should be highlighted connecting customers is our core business and the only scope we have for growing our business.

Perception 2: we will preferentially tariff or charge our own energy storage

Tariffs and charges should be applied fairly. The AER ensures this at each regulatory determination and through the pricing proposal approval process.

We note however the AER has a carve out on tariff equity when it comes to energy storage. The continued application of alternate arrangements for transmission-connected storage which is not subject to any network tariffs versus distribution-connected energy storage which is subject to distribution tariffs creates a seriously distorted 'level playing field' for investors in energy storage on the transmission versus distribution network.

Perception 3: we will provide preferential access to our own energy storage

Dynamic network limits and dynamic access arrangements for devices behind and in front of the meter will be automated and managed by optimising algorithms that cannot differentiate between ownership structures. It is unreasonable to suggest distributors will instruct software manufacturers to prioritise distributor-owned devices. In any case, these types of malpractices are prohibited under the CCA.

We encourage the AER to engage with us directly on unsubstantiated claims from third parties, to assist the AER to have a better understand of how we operate and manage our network.

Perception 4: we will purchase super-sized energy storage to crowd out other market participants

We face a regulatory framework that focuses on cost efficiency. It doesn't make commercial sense to purchase oversized energy storage assets and subsequently be penalised through large capital efficiency sharing scheme (CESS) adjustments or have the assets stranded at the next regulatory determination.

Perception 5: we will discriminate in favour of unrelated parties we have a commercial arrangement with

The AER proposes to insert a new clause in the guideline, in addition to the current non-discrimination requirements, to prevent a distributor from discriminating between two parties where it owns the asset.

We cannot discriminate in terms of network access, and even if such conduct was possible, it could be prosecuted under the CCA.

Perception 6: we will cross subsidise energy storage

EnergyAustralia, AGL, and the Australian Energy Council (AEC) all believe distributors will cross-subsidise contestable services.

While cost-allocation is a genuine concern, it is not insurmountable. Claims that it 'is too hard to determine the right cost allocation' will impede competition and perhaps worst of all, penalise customers. The AEC accusation it is not possible to demonstrate costs associated with certain services are accurate, is false. Our regulatory information notices (RIN) transparently present costs by regulatory segment and are independently audited by Deloitte.

In any event, the cost-allocation concerns above are moot. We have maintained if we invest in energy storage, we will only propose the cost of energy storage net of any revenue earned to be included in the regulatory asset base (RAB). **This means that customers only pay for the cost of energy storage that is used for network services.** This ensures that customers do not pay for more than the benefit they receive from energy storage, which alleviates any cross-subsidisation concerns. This is consistent with the basis on which our waiver application for the United Energy's energy storage trial was approved.

We encourage the AER to assuage stakeholder cross-subsidisation concerns by:

- confirming their confidence in the RIN process, audit and transparent sharing of data by distributors on costs and revenues of different services
- considering developing guidelines for cost allocation for distributor-led storage solutions that can be added to the Cost Allocation Methodology (CAM) that is approved by the AER
- providing consideration to the identifiable and measurable value of network benefits from energy storage. This can be used as a basis for the value that should be added to the regulatory asset base without the risk of cross-subsidisation.

4.2 Regulatory investment test (RIT) process is not the fault of distributors

Since publication of the draft guideline, the AER has raised further concerns about *perceived* discrimination by distributors against third party solutions as part of the regulatory investment test for distribution (RIT-D) process. It is understood this is based on an increased number of complaints received relating to recent RIT-Ds.

It is understood the AER is keen to blame these complaints on the actions of distributors. Whilst we are not aware of any such complaints involving our businesses, we have spoken to other distributors and third-party energy storage providers and understand the real key challenges faced by third parties to be:

- **low returns**—we are currently in the lowest interest rate environment in recent history. This has made network solutions routinely the most cost-effective solution for customers. Third-party energy storage providers are therefore competing with much cheaper solutions that make it difficult for them to be competitive. The rate of return applied to network options is determined by the AER, not distributors. If the concern is the low rate of return, this is a matter third parties should be taking up with the AER, not distributors
- **timeframe for proposals**—the timeframes for the RIT-D have been mandated by the AER. If third parties are concerned the consultation periods are too short, they need to approach the AER and/or AEMC. Due to third parties expressing concern with us directly, we have in some cases voluntarily extended our consultation periods to allow third parties additional time to develop proposals. We are also encouraging third parties to engage early when constraints are identified in our distribution annual planning report (DAPR) rather than wait for the formal commencement of the RIT-D process

- **volatile nature of demand forecasts**—the RIT-Ds are necessarily based on demand forecasts that must be determined years in advance. In many cases, third parties are seeking assurance of revenue from network services many years in advance which distributor cannot provide with any certainty. For example, the COVID environment has demonstrated how unpredictable demand forecasting can be, with a recent joint RIT-T between AusNet Services and United Energy deferred due to recent changes in forecast demand
- **high reliability standards**—distributors operate under a high powered service target performance incentive scheme (STPIS). To ensure customers are indifferent to third party versus network options, third party providers need to provide an equivalent level of service to the network alternative. This has proven difficult for third parties to provide. Consideration could be given to a STPIS holiday however this would reward the third-party provider to the detriment of the customer
- **land availability**—we understand accessing land for third parties has been issue, with communities not always in favour of energy storage devices being located in or around their communities. This can make finding suitable sites very expensive for third party providers to either purchase or lease land.

4.2.1 Recent RIT-D experiences

In the past four years CitiPower and Powercor have conducted four RIT-Ds. As part of these processes we:

- received no formal proposals from third party providers for energy storage
- received a number of informal queries, however, when further information was provided with regard to the nature of the constraint and size of the solution required, this did not lead to any formal submissions. Informal queries were received from councils and community groups, and large-scale generator suppliers.

United Energy have undertaken three RIT-Ds. We received six formal submissions, including a mix of large customer or large site curtailment, virtual power plant (VPP) solutions and diesel generators. A number of proposals were inadequate with regard to size of the solution, i.e. insufficient demand deferral. We progressed with the remaining proposals, seeking to refine the detail and agree the terms and conditions. However, after negotiations were unable to agree on terms such as:

- low network support payments based on the record low AER allowed cost of capital
- uncertainty of future payments due to uncertainty around the ongoing requirement for the solution.

Our learnings and feedback from third parties has been that for those proposals that include customer curtailment or participation, they needed more time to review / analyse network requirements, and survey and engage customers to develop demand management capability.

In response to this feedback, we have started running annual DAPR forums to foreshadow upcoming constraints. We also share information (such as area map / feeder map / details on constraints including load duration curves etc.) with interested parties so that they put forward credible solutions when responding to a RIT-D.

Our experience with the deferrals in the LV network is that if the supply area has larger customers, economic solutions are likely. However, if the supply areas is residential, procurement of demand management solutions is challenging due to the cost of recruitment and insecurity of delivery.

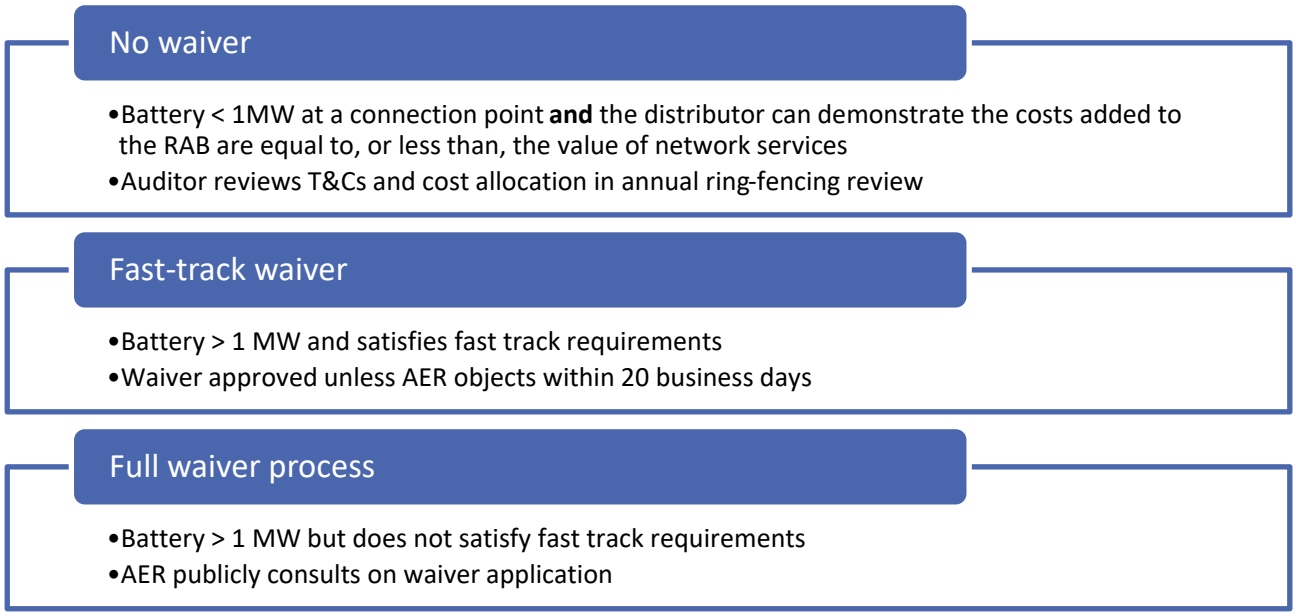
5 Streamlining the waiver process

United Energy's waiver cost close to $100,000 to acquire. This is an equivalent cost to a small network augmentation to alleviate a network constraint at a distribution transformer. It is therefore often cheaper to augment than seek a waiver. This is without even considering costs associated with the delays in the application waiver process, the uncertainty created for partners and the subjective and discretionary nature of AER decisions.

The AER's draft guideline continues to outline an onerous waiver process and does not consider various ownership and business models that are likely to arise in the future. We consider a streamlined waiver process can be created delivers a better balance between energy storage market development and distributor involvement in the same.

Our proposed streamlined waiver process is shown in the diagram below.

Figure 1 Proposed streamlined waiver process



Source: CitiPower, Powercor and United Energy

This is further discussed in the section below.

5.1 No waiver

5.1.1 Batteries below 1MW

In our experience, there has been minimal interest in small batteries (i.e. below 1MW) connected to the distribution network, for reasons mentioned in section 2.2. This is despite the demand for our involvement in smaller community batteries is extremely strong, from customers and communities alike, as well as local and state government (see chapter 3).

Given the lack of interested parties in this market at present, and the strong demand for distributors to play a part, we consider the waiver process would only act as in impediment to a roll-out of community batteries, which would not meet community expectations and further contribute to lack of trust in the industry.

Therefore, for batteries below 1MW we propose distributors should not have to seek a waiver. However, to ensure adequate controls are in place for these batteries, the AER could require that auditors review the

commercial arrangements and cost allocation of distributors in terms of leasing the capacity of these small batteries to third parties to meet the objectives of the ring-fencing guideline.

5.1.2 Costs paid for by all consumers are equal to or less than the value of network services

If the distributor is only adding the value of network benefits to the RAB, cross-subsidisation is not an issue.

As discussed in chapter 3, ownership models that include partnerships and partial ownership by distributors are likely to be a key feature of the roll-out of energy storage, particularly regarding community batteries. In many of these models, the distributor may only contribute financially to the value of network services, while the remainder of cost of the battery is managed by a third party, or a consortium.

Therefore, we consider if a distributor can demonstrate *ex ante* that the value being added to the RAB is the value of the estimated benefit of network services, no waiver should be necessary. While we acknowledge this will be based on a forecast, highly reasonable estimates can be made *ex ante* which are no different to estimates we undertake for equivalent network investments.

5.2 Fast-track waiver

A fast-track process could be established where distributors are able to demonstrate the terms and conditions of access and deployment of the batteries are not discriminatory, and the cost allocation is fair and reasonable. These two matters appear to be the primary concern of those opposed to distributors providing batteries.

To qualify for a fast-track waiver, distributors would be required to provide the following information:

- **terms and conditions**: the AER could outline the minimum requirements to be included in a contract to ensure the terms and conditions are not discriminatory—similar to clause 4.4.1(a) of the ring-fencing guideline
- **cost allocation:** distributor demonstrates that only adding the value of network benefits to the RAB, ensuring the cost allocation is fair and reasonable

In the fast-track process, the AER would have 20 business days to oppose the waiver, else it is approved by default.

5.3 Full waiver

If the battery is above 1MW, the cost added to the RAB is higher than the value of network services, and the project does not meet the fast-track criteria, then an open and transparent consultation process for granting the waiver should be undertaken by the AER.

5.4 Other improvements to the process

Under the streamlined process, we consider new waivers would not be required when extending an existing framework agreement with a third party to which a waiver already applies, for example additional batteries are included. The AER would have 20 business days to oppose the extension to the waiver, else the application is approved.

Further, to give consideration to the various partnership and partial-ownership models that are likely to arise, distributors should not have to run a market test for each partnership if:

- the distributor is approached by the third party for a partnership in an already established business model. In many cases the third party will have a business proposal that includes some distributor involvement or ownership. The distributor should be encouraged to enter that partnership rather than using the proposed business model as a basis for a new market test

- the leasing of the energy storage device where a local community group/council is interested in partnering with the distributor as the leasing party of an energy storage device. This ensures that the community groups/councils are given the opportunity to have a sense of ownership in the energy storage device, even where a third party or a retailer can technically provide the same service for a lower cost.

6 Improving the guideline

This section discusses other proposed changes to the draft guideline where we discuss improvements to the clarity and intent of the definitions and clauses.

6.1 Staff sharing

It is proposed to amend the guideline to require more detailed reporting of staff sharing arrangements between the distributor and their related electricity service provider in the distributor's staff register. We understand that the AER's intent by the proposed new clause 4.2.4(a)(iii) is to balance competing considerations, by:

- allowing (but requiring transparency on the prescribed staff register as to the extent of) transient movement of a distributor's staff between staff positions that can have access to a distributor's ring-fenced electricity information and those that cannot under the guideline
- only requiring such additional reporting on the staff register where this transient movement of staff occurs within a close timeframe, such that there is a heightened theoretical risk of a staff member recalling and using specific and current ring-fenced electricity information once in a staff position for which they are not entitled to, and do not still have, access to this information.

We consider that this risk is incredibly low, given the detailed and changing nature of relevant electricity information, the limits of an individual's verbatim memory for any period of time (six months being more than enough and consistent with other audit and AER dialogue on this topic), and given the prescribed absence of incentive to misuse such information.

We agree with the proposal and intent in principle, but consider the clause is drafted more broadly and ambiguously than is justified. For example, this should not capture movement of (indirect) staff that do not hold staff positions such that a distributor cannot reasonably be expected to control or monitor such granular matters. Further, this should not capture staff who have ceased to have access to electricity information for other reasons, or who have not been in a staff position for which the distributor makes its ring-fenced electricity information available.

Accordingly, we propose clause 4.2.4(a)(iii) be redrafted as follows:

> "*the **staff positions** referred to in clause 4.2.4(a)(ii) (in respect of which the DNSP is not in breach of clause 4.2.2(a) only by reason of clause 4.2.2.(b)(i)(a) which are held, or have been held within the previous six months, (on a temporary basis) by a member of the **DNSP's staff** who ordinarily holds, and during the 6 month period prior to commencing in that temporary position held, another **staff position** at the **DNSP** which ~~whose~~ had access to **ring-fenced ~~electricity~~ information** in respect of that **DNSP** ~~ceased upon, or in the 12 months prior to, commencing in that position~~, and the dates on which that member of **staff** commenced to hold and (if applicable) ceased to hold that temporary position.*"

The AER further proposes to amend the guideline via new clause 4.2.4(b) to require distributor staff registers be updated quarterly, including requiring this information to be current to the end of the previous calendar month. We disagree with the AER's proposal and believe that updating the staff register every half year or six months is sufficient, as is currently the case.

6.2 Access to electricity information

Relatedly, we note that there appears to be an error in the drafting of the office and staff sharing restrictions under clause 4.2.1 and 4.2.2 of the guideline. References to "electricity information" should be to "ring-fenced information", so that it only applies to electricity information acquired or generated by a distributor in connection with its provision of direct control services that is not already publicly available. The intention of these clauses clearly does not apply to all potential electricity information (for example information as to a related electricity service provider's customers).

6.3 Material breaches

The draft guideline requires the reporting of all material breaches within fifteen business days (proposed clause 6.3). However, the AER's explanatory statement indicates it is proposing to amend the guideline to require that all breaches, irrespective of materiality, be reported with fifteen days.[6] The AER will then engage in dialogue with the distributor to determine whether the breach is material.

It is appropriate that the requirement to report material breaches remain. However, where a breach is immaterial, the reporting requirement should not apply. A requirement to report all breaches increases the administrative burden on both distributors and the AER, especially where the guideline is broadly and ambiguously drafted (and thus left open to different reasonable interpretations) and where immaterial breaches pose no threat to competition and increases the risk of near misses going unreported internally. The annual ring-fencing audit is intended to capture immaterial breaches, and to assess distributors' responses to them. We consider that sufficient to assess immaterial breaches.

6.4 Defining materiality

We agree there is confusion over the definition of materiality of breaches, given the AER's unusually narrow construction. The concept of materiality is well understood at law generally as only intended to capture significant matters. We note that whilst the ring-fencing best practice compliance manual was updated in July 2019 and contains guidance on how to assess a breach's materiality, there is still insufficient clarity around what reasonably constitutes a material breach.

Ideally, the ring-fencing guideline itself would clearly define what constitutes a material breach. Such a definition would need to be developed in consultation with distributors.

[6] AER, Draft electricity distribution ring-fencing guideline (version 3), explanatory statement, May 2021, p. 51.

A Benefits from distributor-led energy storage

Battery storage is fast emerging as a valuable tool in providing a range of energy services for customers and communities. As described in this submission, we are trialling our own battery projects and working with third party groups to support their battery projects.

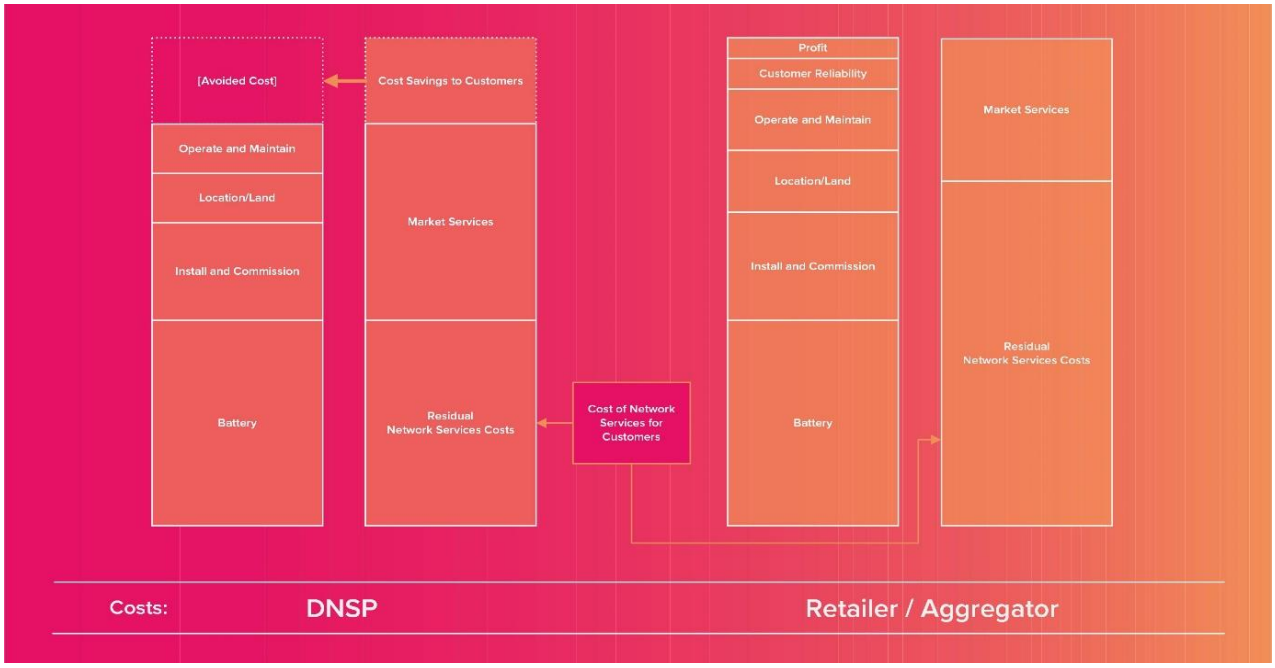
Distributors should not be excluded from providing battery systems as this will unnecessarily increase the cost of these innovative new network services or stifle there development altogether. We say this because:

- a distributor has established teams, systems and processes for equipment installation and commissioning
- distributors have access to land and network infrastructure from existing sites and existing relationships with local councils and community energy groups, providing flexibility for locating near constraints
- distributors have economies of scale to as they operate and maintain and high volume of distributed assets
- distributors also have a single network control system to maintain
- distributors manage the risk of outages and reliability events on a daily basis across their entire network.

To further offset the cost to provide network services, and hence lower costs to consumers, distributors can competitively bid and lease battery capacity for provision of market services and offset overall costs based on the value of the expected market services. Since this will be competitively procured, it is likely to be more beneficial for customers as multiple retailers/aggregators compete for access to the battery for energy arbitrage revenue and other market revenue, such as FCAS.

Through the combination of all of the factors described above, distributors are in a strong position to deliver innovative low-cost network services for customers, compared to retailer / aggregators. The diagram below also summarises how distributors can enable customer storage benefits and do this affordably and reliably.

Figure 2 **Network services costs to consumers from two different models**



Source: CitiPower, Powercor and United Energy