

New Energy Storage Devices Waiver Application

Applicant Information

1	Name(s)	Powercor Australia Ltd
2	Project description	<p>Our project is a Victorian Government funded and supported innovative trial of a neighbourhood battery on our low voltage network. The trial is part of the Victorian Government's Neighbourhood Battery Initiative (NBI), which aims to facilitate and provide support for pilots, trials and demonstrations of a range of neighbourhood scale battery ownership and operational models across the State.</p> <p>Our project trials Powercor owning, operating and maintaining a 120kW/360kWh ground-mounted neighbourhood battery in the Tarneit area, an area experiencing rapid rooftop solar uptake. The Tarneit area was selected by the Victorian Government due to its strong rooftop solar uptake.</p> <p>The battery will form part of our distribution network with the battery providing the following network services:</p> <ul style="list-style-type: none"> • enabling more customers to connect their rooftop solar to the network and export their excess electricity • managing peak and minimum demand, managing voltage and power quality issues, and phase rebalancing. <p>To maximise the market benefits from the neighbourhood battery, we propose to lease the spare capacity to a retail partner, [Confidential:] an unaffiliated entity, to participate in contestable markets at times when the battery is not being used for network services.</p> <p>It is anticipated the retailer will use the spare battery capacity to participate in wholesale market arbitrage, and frequency control ancillary service (FCAS) markets once integrated into a virtual</p>

power plant (VPP). [Confidential:]

The lease agreement will stipulate the operating parameters and priority use cases for the battery, with network services being rated as the top priority use cases. Wholesale market services, or any other customer services the retailer may provide, will be prioritised lower than the network service.

As part of the project, we will trial the use of dynamic operating envelopes to the battery, to allow the battery to optimise on network conditions at different times of the day, season or under different weather conditions. The learnings from this trial will assist us in facilitating an orderly transition to the role of the distribution system operator (DSO), as envisaged in Energy Security Board's (ESB) post-2025 National Electricity Market (NEM) design.

In addition, we will trial an innovative network tariff arrangement that is designed for a distributor-owned community battery. Our tariff trial was approved by the AER as part of our 2022-23 annual pricing proposal.

We are confident the trial will demonstrate neighbourhood batteries have a critical role in Australia's transitioning energy system, and that distributors are well placed to own and operate these batteries, through partnerships with retailers and other third parties, to the benefit of all electricity consumers.

3 Reason for waiver

Community batteries are most valuable to customers when their full value to the entire energy system and the local communities can be utilised. That is why we plan to lease the excess capacity of the battery at times when we are not using it to exclusively provide network services. The excess capacity will be leased to a NEM participant to extract the wholesale market value and NEM ancillary services value given distributors are not permitted to participate in those markets. Please see Appendix A for the estimated use cases and hierarchy of uses.

4	Period of the waiver	<p>We propose the waiver commence on the date it is granted and continue until 30 June 2033, which allows for 10.5 years from the commissioning date. That is, the proposed waiver period will commence in the 2021–2026 regulatory period, cover the entirety of the next regulatory period and part of the 2031-36 regulatory period.</p> <p>The waiver is required for this period to allow us to use the battery to provide standard control services for the life of the asset (the designed life of the asset is 10 years). The lease arrangement with the retailer will be for the same period.</p> <p>An additional six-month waiver period beyond the designed life of the asset is to allow sufficient time for the removal of asset prior to the end of the relevant financial year.</p>
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Supporting information for waiver application

This section is to provide information that will assist the AER's assessment of whether the benefits outweigh the costs for the battery project.

<p>5 Costs if waiver not granted</p>	<p>The waiver would allow for the full value of the community battery to be unlocked for all customers. All customers on our network benefit from the waiver being approved as the value of the lease would not be paid by customers either through the regulatory asset base (RAB) or through demand management innovation allowance (DMIA). If the waiver is not granted, the lease value, [Confidential: [REDACTED]] would be paid for by all customers through the DMIA.</p> <p>While we have not quantified other costs to customers, they include:</p> <ul style="list-style-type: none"> lost opportunity to lower electricity prices from allowing another resource to participate in the NEM lost opportunity for the Victorian Government to test various models of community battery ownership and operation, including our innovative partnership model
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6 Benefits if waiver granted

where distributors and retailers work together to unlock the full value of a community battery

- **[Confidential:** [REDACTED]
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[REDACTED]
[REDACTED]]
- lost opportunity to increase competition in the community battery market, by allowing retailers that are not interested in owning electrical assets to participate in the market.

If the waiver is not granted, we would only be able to extract the network service use cases.

Rejecting the application for waiver is not in the long-term interests of customers, or the electricity market as a whole. In contrast, granting the application for waiver and allowing the trial to proceed promotes the National Electricity Objective (NEO).

The benefits to the local community in Tarneit, participating customers and the wider electricity system will outweigh the cost of the trial in the medium to longer term, particularly when both tangible and intangible benefits are considered.

These benefits include:

- enabling more customers to export more solar energy than they would otherwise be able to, enabling a faster transition to renewable energy future whilst lowering wholesale electricity prices
- permitting customers unable to afford a home battery, or who do not have the physical space for battery, to benefit from local storage when participating in the tariff trial
- allowing all customers to benefit from the deferral of investment in long lived network assets
- all customers benefiting from a more stable grid through provision of lower cost FCAS services.

Applications that sufficiently address risk of cross subsidisation or where the risk does not arise could be eligible for the streamlined waiver process.¹

[illegible]

² For information on cost allocation methods, see AER, *Electricity Distribution Ring-fencing Guideline– Explanatory Statement (Version 3)*, p 35-36.

		<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>The proposed trial does not give rise to the risk of cross-subsidisation because: 1) the retailer's lease payments, and the Victorian Government funding, will be netted off the cost of the battery, meaning customers do not pay that value at all; b) the value being added to the RAB is the value of network benefits at the location of the battery. By only adding the value of network benefits in the RAB, the risk of cross-subsidisation through the use of the RAB is eliminated; 3) the residual cost of the battery is to be funded through the demand management innovation allowance (DMIA), which is appropriate given the novel and innovative nature of the project. It should be noted that future projects of this nature are likely to be cheaper if systems developed for a first unit can be leveraged for further units. This would apply for distributor led and third party led projects.</p>
8	Process to engage third party suppliers of network services³	<p>Our retail partner was selected at the time of the application for NBI funding. Given the very short turnaround for the NBI application, we were not in a position to run a formal market test for the retail partner. However, we approached a number of retailers informally to understand their appetite to partner with us in the NBI application.</p> <p>In normal circumstances, where the project is not tied to a short turnaround for government funding, we would have conducted a tender process for leasing of the battery.</p>
9	Any other information	<p>The success of this neighbourhood battery trial will be dependent on community support, experience and sentiment. We are aware of the challenges new electricity infrastructure can bring to any community, and already have channels developed to listen to the concerns of our community, as well as to address any potential concerns proactively. For this trial we have partnered with the Wyndham City Council, and with support from the Western Alliance</p>

³ AER, *Electricity Distribution Ring-fencing Guideline – Explanatory Statement (Version 3)*, p 34-37.

for Greenhouse Action, to execute a comprehensive engagement plan. The objective of the plan is to increase community awareness of community batteries, how they can participate in the trial as well as considering community perspectives on the final site location, including requirements, planning and permits. Further, we understand knowledge-sharing and dissemination of information is key to informing the wider industry on how best to approach neighbourhood batteries. As we progress through the trial, we are working with the Victorian Government and other stakeholders to develop a knowledge sharing platform that meets everyone's needs. Some of the ways we plan to knowledge share include: hosting dedicated webinars to present the project and trial outcomes; engaging with industry bodies and stakeholders throughout and following the completion of the project; publishing periodic reports on our website and project partner websites. Overall, we will work at various stages of the project to raise awareness of the project and identify opportunities to share knowledge. The community engagement strategy, including knowledge sharing initiatives, is provided in appendix B.

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Appendix B

Stakeholder Engagement Plan, Tarneit Community Battery Project

Project information	
Key project contacts	<ul style="list-style-type: none"> Greg Hannan, Head of Network Strategy and Non-Network Solutions: grhannan@powercor.com.au Farshad Charmchi, Project Manager: Farshad.Charmchi@ue.com.au, 0477 979 242 Stuart Scudamore, Stakeholder & Engagement Advisor: sscudamore@powercor.com.au, 0413 075 395
Location	Gleneagles Avenue Reserve, The Parkway, Tarneit VIC 3092
Description of works	The works involve the installation of a community battery within Gleneagles Avenue Reserve, adjacent to existing Powercor infrastructure. The works will involve a short power outage to connect the battery to the network.
Timing	TBC. Approximately one week of site preparation, and one day for installation.
Work hours	7am – 5pm weekdays.
Construction impacts	<ul style="list-style-type: none"> Standard construction works noise Access along The Parkway & Gleneagles Avenue Potential road closures Impacts to The Parkway & Gleneagles Avenue residents
Outages	TBC
Key stakeholders	
Tier 1 Engage	Tier 2 Inform
<ul style="list-style-type: none"> Wyndham City Council Melbourne Water (Tarneit Road Retarding Basin) Commercial partner – TBC Construction contractor 	<ul style="list-style-type: none"> The Parkway residents (negotiables) Gleneagles Avenue residents (negotiables) Foxfield Way residents (negotiables) Tarneit community (awareness campaign)
Key contacts	
Name/organisation	Contact information
Daniel Mack/Wyndham City Council	Daniel.mack@wyndham.vic.gov.au
Sarah Dalton/Wyndham City Council	Sarah.Dalton@wyndham.vic.gov.au
Social risk assessment	
Area information	<ul style="list-style-type: none"> 11 properties located on The Parkway adjacent to project area 4 properties located on Gleneagles Avenue adjacent to project area 7 properties located on Foxfield Way adjacent to project area.

Public transport	Bus routes 180 & 182 located on Tarneit Road 150-200m north of corner of Tarneit Rd/Gleneagles Dr. Unlikely to be impacted by project.				
Parking	Private drives placate on-street parking requirements				
Language demographic	Language spoken at home other than English ⁴	Tarneit	Percent of population	Victoria	Percent of population
	Punjabi	2,865	8.3%	56,171	0.9%
	Hindi	1,986	5.7%	51,241	0.95%
	Gujarati	1,170	3.4%	15,059	0.3%
	Urdu	1,055	3.1%	23,205	0.4%
	Arabic	870	2.5%	79,589	1.3%
	English only spoken at home	14,217	41.1%	4,026,811	67.9%
	Households where a non-English language is spoken	5,921	58.4	624,141	27.8%
	<p>CALD communities must be engaged in ways that meet their communication needs, to ensure the community is educated and understands how they can participate in the engagement program, battery trial, and the retail offer. We will seek advice on language and channels from City of Wyndham.</p> <p>We have translated major communications materials into three major LOTE languages and distributed the materials on 14 April 2022.</p>				
Risk	Concerns	Controls			
Safety - construction	Safety of pedestrians and vehicles around works.	<ul style="list-style-type: none"> • Appropriate traffic management plan and signage where required • Construction safety signage/public delineation. 			
Safety - operational	Operational concerns that may impact public perception – EMF, fire, noise etc.	<ul style="list-style-type: none"> • Engage with residents directly to alleviate concerns around battery operation • FAQ document • Community information campaign – social media, website promotion. 			
Traffic	Disruption to flow of traffic on The Parkway/Gleneagles Avenue, causing congestion.	<ul style="list-style-type: none"> • Traffic management and advance traffic signage (as required). • Notifications to directly affected residents regarding traffic impacts (where required). 			

⁴ https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC22439?opendocument

Construction noise	Construction noise adjacent to residences causing community complaint.	<ul style="list-style-type: none"> • Avoid out of hours work. • Complete works during normal construction hours unless safety/permit requirements does not allow.
Access/parking	Impacted access or parking causing community complaint	<ul style="list-style-type: none"> • Avoid setting up site where access/parking is impeded where possible. • Engage with residents when access cannot be maintained to ensure minimal disruption.
Complaints	Complaints from community around neighbourhood battery initiative or battery installation.	<ul style="list-style-type: none"> • Complaints should be directed to Powercor as first point of call, then escalated to us as needs be. • Avoid double handling if it is a technical complaint/query • Subcontractor brief. • Community information readily available. • Proactive community engagement.
Recommendations	<ul style="list-style-type: none"> • Direct engagement with impacted residents and businesses (regular door knock conversations). • It is recommended that the translator footer is used on communications. • Promote project internally through MyConnect. • Awareness notification to be translated into LOTE, with translation services provided on all subsequent communications. • Visual representation of battery (images, render, diagrams) to be included in communication materials. 	

Communication and engagement activities

Objectives	To minimise community impact, promote local community benefits and continue to improve client, council, and community relationship	
Project stage	Key actions	Supporting material
Planning phase	Brief key stakeholders by providing an overview of the works and talk through any concerns	<ul style="list-style-type: none"> • Site visit • Communication materials • Provide Wyndham with materials prior to distribution
	Brief call centre	<ul style="list-style-type: none"> • Updated key messages • Copy of latest materials
	Letter box drop #1 320 houses	<ul style="list-style-type: none"> • Battery awareness notification delivered on 14 April 2022
	Drop-in sessions Diamantina Community Centre, Congo Drive, Tarneit.	<ul style="list-style-type: none"> • Tuesday 26 April 2022 <ul style="list-style-type: none"> ○ Morning (8 – 10am) ○ Evening (4 – 6pm)
	Tarneit MP site visit with Powercor representatives.	<ul style="list-style-type: none"> • Thursday 2 June 2022 1.15pm
	Letter box drop #2 320 houses	<ul style="list-style-type: none"> • Battery engagement notification with site location delivered 30 May

	<p>Community event at Gleneagles Avenue Park</p> <p>Thursday 9 June 10am-2pm</p>	<ul style="list-style-type: none"> • Powercor & Wyndham representatives • Wyndham CC Councillor in attendance • Coffee van with free coffee for attendees • Opportunity for locals to ask questions about battery
Delivery stage	Official project launch ceremony	<ul style="list-style-type: none"> • Signage installed at battery site with information • Launch of battery with MP, Wyndham CC and DELWP. • Media story • Social media promotion
	Ongoing engagement with the local community	<ul style="list-style-type: none"> • Ongoing engagement with the local community - meetings with directly affected residents and businesses as required
Project completion	Media story/social media story/ Internal story – Project completion story	<ul style="list-style-type: none"> • Content brief/s
	Thank you letter/postcard to residents/businesses	<ul style="list-style-type: none"> • Letter • Postcard • Voucher
	Close out notice to stakeholders including Council	<ul style="list-style-type: none"> • Email • Phone call • Meeting
	<p>Stakeholder interviews - Select top 3 stakeholders and ask up to 5 questions about their experience with the project.</p> <p>Apply key outcomes to improve future project delivery.</p>	<ul style="list-style-type: none"> • Interview questions (via phone or online survey sent via email) • Gauge reaction to community battery scheme
Communication assets		
Calling card for directly affected businesses/residents – due to COVID use card to leave at businesses		TBC
x2 notification letter to local residents		TBC
Project signage		TBC
Action		Timing
Engage with Client and affected stakeholders on the construction method, anticipated impacts, outage timing and access arrangements.		Ongoing
Brief other key stakeholders		Ongoing

Set up project webpage – summary and key messages	28 March 2022
Letterbox drop to residents – awareness campaign: introduce batteries and project proposal, provide FAQs	14 April 2022
Powercor & Council representatives were available for F2F conversations at drop-in sessions at chosen location (see above)	26 April 2022
Targeted Facebook campaign – Tarneit community geotargeted by postcode with awareness messaging	25 April 2022 – 15 May 2022
Letterbox drop to residents – engagement campaign: battery location, and event details	30 May 2022
Community event in Gleneagles Avenue Park <ul style="list-style-type: none"> • Coffee van • Powercor and Wyndham reps • Opportunity for locals to ask questions 	9 June 2022
Site preparation and battery installation Powercor representatives to conduct ongoing engagement with directly impacted residents and discuss community negotiables.	July 2022 – December 2022 (TBC)
Minister site visit	August 2022 – September 2022
Battery installation and network connection complete Targeted Facebook campaign – project complete	August 2022 – December 2022 (TBC)
Internal story/ Media story – project completion	August 2022 – December 2022 (TBC)
Thank you letter/postcard to residents/businesses	August 2022 – December 2022 (TBC)
Close out notice to stakeholders including Council	August 2022 – December 2022 (TBC)
Stakeholder survey/interviews	December 2022 (TBC)