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Ms Stephanie Jolly Australian Energy Regulator

Submitted via email: <u>AERringfencing@aer.gov.au</u>

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Dear Stephanie

Ausgrid submission to the AER's consultation on CPU's ring-fencing waiver application – EVCI [AER reference 18220862]

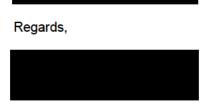
Ausgrid is pleased to provide this submission on the proposed ring-fencing waiver to allow CitiPower, Powercor and United Energy (CPU) to deploy 100 kerbside electric vehicle (EV) chargers across CPU's distribution areas in Victoria on a trial basis.

Ausgrid operates a shared electricity network that powers the homes and businesses of over 4 million Australians living and working in an over 22,000 km² area from Sydney's CBD to the Upper Hunter in NSW.

Ausgrid supports CPU's ring-fencing waiver application. We anticipate that the trial will provide valuable learnings which could support greater competition in the provision of kerbside EV charging services to customers. This, in turn, could lead to better pricing and availability of EV charging infrastructure (EVCI) for consumers. The transition to EVs, alongside broader electrification efforts, will deliver significant economic, social and environmental benefits for Australia and will reduce household energy costs for all consumers. Reducing emissions from road transport is critical to Australia's transition to net zero emissions by 2050.

Ausgrid is committed to supporting government and industry efforts to increase EV uptake, such as the NSW Government's target for EVs to comprise more than 50% of new car sales by 2030-31.1 Further, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) estimates that 2.8 million public chargers will be needed in Australia to support EVs by 2030.2 We believe that Distribution Network Service Providers (DNSPs) are best placed to deliver a significant portion of the public kerbside EVCI required to support EVs by installing EV chargers on power poles. If permitted, DNSPs can dramatically and rapidly increase the availability of kerbside EVCI, giving consumers the confidence to invest in, and benefit from, EVs sooner and support Australia's broader decarbonisation efforts.

In Appendix A, we set out our views on the questions posed by the AER in its consultation paper. For further information on this submission, please contact Simon Moore (Senior Policy Advisor Electrification) via



Timothy Jarratt Group Executive, Market Development & Strategy

² CSIRO, 'Changing gears: your guide to low emissions transport' (accessed 11 June 2025)



¹ NSW Government, 'NSW Government's Electric Vehicle Strategy', (accessed 10 June 2025)



Appendix A: Ausgrid's response to consultation paper questions

Question 1: Do the current dynamics of the markets suggest a thriving and competitive marketplace?

The kerbside charging marketplace is relatively immature

The alternating current (**AC**) kerbside EV charging market is immature and faces barriers which may prevent it from becoming a fully competitive and thriving marketplace. At present, our understanding is that the sector is dominated by government grant funding initiatives and few public kerbside AC kerbside chargers in Australia exist without being underpinned by taxpayer funding (directly or through councils). We have observed little to suggest this is likely to change soon. Therefore, our view is that there is not a healthy competitive market for kerbside EVCI that can operate sustainably without government intervention.

Site selection for commercial kerbside EVCI, even when backed by government grant funding, is dominated by commercial considerations of where charging utilisation will be highest. This results in generally denser and wealthier areas attracting investments from government-backed programs, while other areas miss out. This results in the areas that could benefit most from EVs not having the same opportunities as areas that already have strong EV uptake.

The 'chicken and egg' dilemma exists for EV uptake and EV charging, whereby prospective EV purchasers hold off on moving away from petrol powered vehicles due to concerns about a lack of public kerbside charging infrastructure.³ High upfront costs of EVCI and low utilisation contribute to the commercial challenges for Charge Point Operators (**CPOs**). As a result, at this stage of EV uptake, kerbside AC EV chargers do not provide an attractive commercial return. Our view is that this is unlikely to change until a critical mass of EVs are sold, limiting investment in the EVCI market. The dilemma is worsened in less affluent areas, where users could benefit from the reduced running costs of EV ownership, but are locked out by less access to off-street kerbside charging, especially if renting or living in an apartment. Reduced access to EVCI is a particular issue in regional and remote areas due to lower utilisation levels.

Under the commercial (unregulated) model, EV users who lack access to off-street charging face kerbside charging prices which are significantly higher (currently around 50c/kWh in NSW, which we anticipate would be similar to the prices charged by kerbside EVCI operators in Victoria once some are installed)⁴ than those paid by users who can charge at home (around 20c/kWh in Victoria).⁵ The presently sparse deployment of kerbside EVCI results in the operator of a kerbside charger without local competition being granted what is effectively a mini monopoly of all the customers who would find that charging location convenient. This inevitably leads to higher prices to charge, which we see in the grant-funded chargers currently deployed in other jurisdictions. The absence of an affordable charging option for EV users who lack a driveway or garage embeds inequality in the ability of the Australian public to save from EVs. A DNSP-led model that facilitates multiple retailers/e-mobility services providers (eMSPs) to sell energy to customers via DNSP-provided kerbside charging hardware would create retail competition at point of sale to the customer, leading to greater choice for the user and ultimately, cost savings.



³ For example, the current lack of public kerbside EVCI is a major factor cited for people being reluctant to purchase EVs e.g. Australian Automotive Dealer Association (AADA) EV & Hybrid Vehicle Insights Report and Yougov, referenced in Switchedon, 'Most Australians think there are too few public charging stations to support EVs' (20 May 2024)

⁴ Based on our review of prices offered by kerbside charging operators.

⁵ Origin, 'Electricity', (accessed 11 June 2025)



DNSPs primarily benefit from utilisation, not ownership

It is also important to dispel some commonly cited myths about DNSP provision of kerbside EVCI.

- Asset ownership is not the goal: In our view, the primary benefit of expanded kerbside EVCI to DNSPs, including CPU, is not the ownership of assets. Even a large-scale deployment of network owned chargers (e.g. 11,000) would amount to an approximately 0.3% change in the value of Ausgrid's regulatory asset base as at the end of our current regulatory period, and we expect ratios to be similar for other DNSPs.
- Retailing of electricity is not involved: Our understanding is that DNSPs, including CPU, do not intend to become involved in the retail provision of electricity for kerbside charging. It is clear that CPU's involvement would end at the provision and maintenance of the hardware and establishment of a platform over which competition between eMSPs could occur.
- Goal of increased utilisation: Our view is that the increased utilisation of the network resulting from the large-scale adoption of EVs would lead to the greatest benefit to DNSPs, including CPU, and customers. Increased availability of EVCI and the increased EV uptake that follows will support lower electricity prices for all electricity customers through increased utilisation of distribution networks. Utilisation could be further increased by DNSPs filling gaps through installing kerbside EVCI in more locations where private entities do not operate due to a lack of commercial viability. This could be affected by CPU through this trial.

Insufficient availability of kerbside EVCI is a key barrier to EV adoption. The installation and operation of kerbside EVCI by DNSPs, including by CPU through this trial, where and when the competitive market is unable to fulfill a need will be critical in achieving the broader objective of accelerating EV adoption. Displacing commercial EVCI operators does not serve DNSPs, including CPU, in meeting this objective.

Question 2: Do you agree a market insufficiency exists? What are your views on the cause of any coverage gaps across 'metropolitan' (i.e. inner city urban areas), suburban and regional Victoria?

We note that access to kerbside EV charging in Victoria appears to be lower than in NSW. The NSW Government has allocated \$4.1 million in funding towards the installation of 671 kerbside EV charging ports, and a further \$4.5 million is available for a second round of funding. In comparison, in Victoria it appears that there is no kerbside EVCI in CPU's network, however, some funding has been committed for kerbside EVCI and CPU have received applications for third-party kerbside EVCI. CPU's wavier is seeking to address this disparity between states.

Additionally, it is useful to note that the deployment of EVCI in Australia lags far behind peer countries. 10

⁸ AER, "Transcript AER workshop on the CitiPower, Powercor, UnitedEnergy ring-fencing waiver for EV charging infrastructure – DNSPs and its related entities' (5 May 2025), p 4.



⁶ NSW Government, 'NSW Climate and Energy Action' (accessed 4 June 2025)

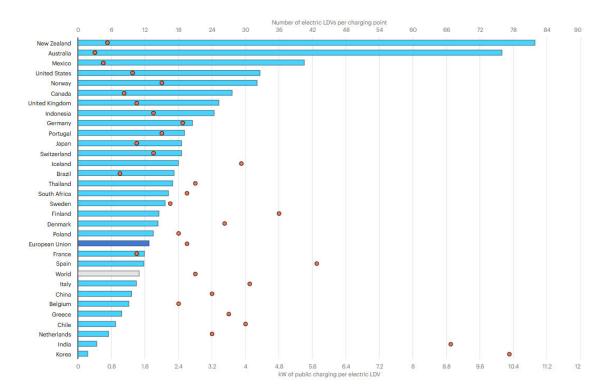
⁷ Ibid

⁹ ARENA, 'Boosting street-side EV charging across Australia', (7 February 2025); Victoria Department of Energy, Environment and Climate Action (DEECA), 'Zero Emissions Vehicle Emerging Technologies', (13 October 2024), ; CPU, 'Proposed Operating Model Electric Vehicle Changing infrastructure Trial', (May 2025) [2.1.5].

¹⁰ International Energy Agency, 'Global EV Outlook 2025 Electric vehicle charging', (accessed 5 June 2025)



Number of electric light-duty vehicles per public charging point and kilowatt per electric light-duty vehicle, 2024



The International Energy Agency (**IEA**) data above shows that Australia has the second highest number of EVs per public charging point among IEA/Organization for Economic Co-operation and Development (**OECD**) member countries. Additionally, Australia ranks last in kW of public charging per EV (shown by orange dots). Therefore, deployment of EVCI under the existing market arrangements has failed to keep pace with other markets. The world average is 1 public charging point for every 11 EVs, whereas Australia has 1 public charging point for every 76 EVs.¹¹ This lack of EVCI likely contributes to the lower-than-desirable uptake of EVs in Australia and increasing emissions from Australian transport. In seeking to demonstrate the merits of alternative deployment models, CPU's trial may help to reduce the gap between Australia and its OECD peers.

Question 3: What are your views on the potential benefits that may be gained from CPU's trial, including for network learnings?

Network learnings will better support the EV industry

We anticipate that CPU's trial waiver will provide beneficial network learnings which would better support the EV industry. In particular, other DNSPs and charge point operators would benefit from CPU publishing their learnings on demand management, network hosting capacity, pricing, their operational and commercial model, customer learnings and usage. However, we note that the reporting obligations for CPU needs to be balanced with the cost therefore, it is important that CPU is only required to provide information that leads to network learnings that add value.



¹¹ Ibid.



- **Demand management:** Ausgrid is interested in learnings that may be generated from CPU's trial with respect to any demand management and tariff interactions. ¹² Kerbside EV chargers could be used as a tool to assist DNSPs with managing peak demand and minimum system demand events. An improved ability to manage peak demand could reduce or the delay the need for future network augmentations, resulting in downward pressure on electricity prices for customers. Reporting on demand management learnings could be facilitated through the Demand Management Innovation Allowance Mechanism (**DMIAM**).
- Network hosting capacity: By locating kerbside charging where adequate capacity exists, networks can be better utilised. Ausgrid would welcome a greater understanding of CPU's approach to using the trial to improve utilisation and how it could provide financial benefits for customers over the longer term.
- Pricing: CPU proposes to create competition at the socket by enabling multiple eMSPs to retail
 energy at each charging point. The prices that result from competition at the charger would
 significantly contribute to informing the debate on the merits of an open access model for kerbside
 EVCI and its potential benefits for consumers. Currently, customers are locked into a single eMSP
 when accessing kerbside EVCI.
- **Operational and commercial model:** Kerbside EV charging in Australia is still a developing sector. Given the immaturity of the sector, it is to be expected that trials, including, but not limited to, CPU's proposed trial, will generate additional and useful learnings.
- Customer learnings: The trial will help to understand EV customer behaviours that will help forecast demand across the network for different EV charging preferences. We have met with customers who have told us that their decision to purchase an EV was motivated by the installation of nearby public kerbside charging. 13 Recently, we carried out a survey of over 700 customers in our network area which indicated that 68% of those surveyed would be more likely to buy an EV if public charging was more widely available. Actual data would augment existing survey data.
- **Usage:** Having access to usage data from this trial would assist the market and local governments to determine the optimal mix of dedicated vs non-dedicated kerbside EVCI parking spaces.

Demonstrating whether DNSP kerbside EVCI addresses the 'chicken and egg' dilemma

As discussed in Question 1, the 'chicken and egg' dilemma has resulted in commercial network operators being unwilling to serve areas with low EV uptake, but potential EV drivers will not take up EVs until better public charging is available. If CPU was to fill in some of these charging 'deserts', CPU's trial would assist in determining whether there is a necessary role for DNSPs in providing kerbside EVCI in commercially unattractive locations.

Based on Australian Energy Market Operator (**AEMO**) forecasts, approximately 138,000 EVs are expected to be in use in Victoria in 2025-26, with a surge in EV ownership in the late 2020s.¹⁴ However, around 25% of Victorian residents live in strata-managed apartment buildings that do not have access to EV charging,¹⁵ and



¹² CPU, 'Proposed Operating Model Electric Vehicle Changing infrastructure Trial', (May 2025), [2.1.3].

¹³ ABC News, 'Plugging into the power of poles', (14 May 2025),

¹⁴ Calculated based on a weighted average of the number of EV's predicted to be in use in Victoria in 2025-26 AEMC based on likelihood of future scenarios. Sources: '2024 ISP Inputs and Assumptions workbook' (30 July 2024), 'Battery & Plug-in EVs' tab; AEMC, '2024 Integrated System Plan' (26 June 2024), pages 9, 50.

¹⁵ Victoria DEECA, 'Electric vehicle ready buildings' (accessed 19 May 2025)



therefore are reliant on public charging infrastructure. Customers living in terraced housing, or who rent and lack the ability to install a home charger, are also likely to benefit from expanded access to local kerbside charging.

There are potential benefits in contributing to meeting government objectives

Electrification of the transport sector is critical to meet state and federal emissions objectives. As Victoria moves towards fulfilling its Zero Emissions Vehicle Roadmap, which includes that all newly sold vehicles will be zero-emission by 2035, 16 the roll out of kerbside EVCI is vital. By improving understanding of the extent to which the rollout of EVs can be accelerated via deployment of DNSP led public kerbside EVCI, CPU's trial can make a significant contribution to EV policy.

Question 4: What are your views on CPU's claim that they can provide kerbside EV chargers more cost-effectively than other third parties?

DNSP led deployment of kerbside charging hardware can make savings via:

- Using their locally available and experienced existing workforce and equipment to maintain kerbside EVCI on a fully cost allocated basis, consistent with ring-fencing requirements.
- Economies of scale, by coordinating maintenance of kerbside EVCI with other network activities
 where this is consistent with ring-fencing obligations and does not result in cross-subsidisation of
 unregulated services (if relevant). Using an existing workforce will also eliminate the cost of safety
 training for new workers and help ensure that high quality safety procedures are followed. We agree
 with CPU's submission that their ability to use economies of scale without cross-subsidy or
 discrimination should not be prohibited given the purpose of the Electricity Distribution Ring-fencing
 Guideline.¹⁷
- Use of existing electrical infrastructure (e.g. poles), which also avoids the need for excavation and reduces disruption for the community.
- Being incentivised under the Efficiency Benefit Sharing Scheme (EBSS) and a Capital Expenditure Sharing Scheme (CESS) to ensure that the DNSP installs and maintains kerbside EVCI in the most efficient way.

As identified in response to Question 1, by facilitating retail competition at the point of sale using network provided hardware, it is also possible for DNSP-provided kerbside chargers to drive down the price of charging for consumers.

Additionally, where regulatory approvals allow, DNSP-provided charges could be subject to regulatory obligations or performance incentives to deliver improved reliability outcomes, reliability being a known issue for some commercially-owned public EVCI. This could increase the availability of kerbside EVCI to consumers and improve consumer experience.



¹⁶ AER, 'Consultation paper Ring-fencing waiver application for an EV charging infrastructure trial from CitiPower, Powercor, and United Energy', (April 2025) (**Consultation Paper**); Consultation paper, page 14, citing Victoria DEECA, '<u>Victoria's Zero Emissions Vehicle Roadmap</u>', (May 2021).

¹⁷ CPU, Supplementary Ring-fencing Waiver Application – EVCI titled 'Application for a ringfencing waiver electric vehicle charging infrastructure project', p 4, 5.



Question 5: What do you view as the potential risks to competition from CPU's proposed trial?

While the consultation paper cites the risk of the trial negatively impacting competition in EV charging, CPU's proposal to enable multiple third-party eMSPs to participate in the trial will, in practice, promote competition at the point of sale rather than jeopardising it.

It is likely that more kerbside EVCI being installed by CPU will stimulate uptake of EVs and demand for kerbside EVCI. Ultimately, this will increase the economic viability of operating commercial kerbside EVCI, benefitting both commercial and regulated participants. Further, increased EV uptake will likely result in increased charging at non-kerbside locations (e.g. shopping centres) due to EV owners not only charging near their homes.

However, we acknowledge that the impact of CPU's proposed trial on EVCI provider/operator competition is highly dependent on site selection. If CPU chooses poles that commercial operators would not find attractive, the trial is unlikely to deter competition in EVCI.

Finally, CPU's trial is time limited. Therefore, there is limited risk for long term harm to the market if the trial is not successful.

Question 6: What are your views on CPU's proposed method of selecting EV charging sites based on areas with high EV ownership, and number of units (100 EV chargers)?

Considering the small number of charging sites proposed by CPU and the limited duration of the waiver, we consider that CPUs method in targeting sites based on areas of high EV ownership is appropriate to ensure sufficient charging activity occurs to generate valuable learnings.

In the context of broader (hypothetical) regulatory changes, we consider that DNSPs installing kerbside EVCI would provide the most value to areas that are currently commercially unattractive and where current and future EV owners do not have access to at-home charging (e.g. because of strata block restrictions on charging, high levels of renters or limited off-street parking). Installation in a variety of locations would be most beneficial to provide learnings across different communities and contexts.

If the 100 trial charges were maintained past the trial period, it represents only 0.004% the of the 2.8 million chargers that the CSIRO estimates will be needed in Australia by 2030.¹⁸

Question 7: What are your views on the depth of the market for kerbside AC EVCI?

Please see our response to Question 1 and the first paragraph of Question 2. Across Australia, public kerbside EVCI is predominantly reliant on government funding and therefore cannot properly be characterised as a deep market. Even in states where grant programs have been more extensive than in Victoria, the commercial kerbside EVCI sector has not been able to expand into commercially self-sustaining kerbside AC charging.

Question 8: What are your views on the potential for CPU to discriminate against third-party EV charging service providers?

Our view is that CPU likely does not have a sufficient incentive to discriminate against third-party EV charging service providers. Ultimately, the goal is to increase charging, and if CPOs would like to build chargers on CPU's poles, the existing non-discrimination obligations are sufficient.



¹⁸ CSIRO, 'Changing gears: your guide to low emissions transport' (accessed 11 June 2025)



Question 9: Would the conditions above be fit for purpose, if a waiver is granted? Which are higher or lower priority?

Aside from the first proposed condition, the conditions proposed in the AER's consultation paper may be disproportionate given the scale of trial.¹⁹ Waiver conditions should provide guardrails for carrying out the activity, rather than inhibit the proponent from doing so.

Aside from the condition explored in Question 10, the first proposed condition, regarding publishing the justification of CPU's approach to selecting EVCI sites, should be the focus of any waiver conditions. The mechanism for achieving this should be proportionate to the limited scope of the trial (noting there are approximately 850,000 poles in CPU's networks, the impact of chargers on 100 poles [approximately 0.02%] in the scope of the trial is limited).²⁰ It is also unreasonable to expect CPU to have a perfect methodology for selecting such sites upfront, given that it is a trial. Rather, understanding CPU's selection process could be used to inform and iterate on the design of an appropriate methodology.

Regarding the fourth proposed condition, DNSPs already have highly stringent cybersecurity obligations in place, including the *Security of Critical Infrastructure Act 2018* and the corresponding rules and state imposed licence conditions. Additional conditions in the waiver are unlikely to provide any further benefit.

Question 10: What other conditions should be placed on the waiver, if granted, to prevent discrimination or to preserve fair market competition, and maximise the benefits from the trial?

We suggest that the AER consider placing a waiver condition that CPU use open protocols (such as OCPI and OCPP) in their kerbside EVCI. We understand that this is already proposed by CPU,²¹ however, the AER may deem this important enough to impose a condition to this effect.

Open protocols enable eMSPs to operate at each of CPU's EVCI on the same terms as other eMSPs, promoting competition in the eMSP market and avoiding discrimination. ²² Use of open protocols will also contribute to maximising the learnings from CPU's trial, for example, by enabling learnings about what costs eMSPs pass on to EV customers and potentially why one eMSP is selected over another.

Question 11: What data should CPU share as a minimum and are there specific metrics that should be used – for example, specific metrics for measuring connection times?

The usage and performance data suggested by the AER that that CPU could share is reasonable and beneficial.

The data necessary to obtain network learnings identified in Question 3 should be required. This includes data on:

- Responses to dynamic pricing signals
- Reduction in costs passed on by CPU to eMSPs due to demand management and better utilisation of the network, if applicable



¹⁹ Consultation paper, page 18.

²⁰ CitiPower and Powercor, 'Network assets' (accessed 4 June 2025); United Energy. 'What we do' (accessed 4 June 2025)

²¹ CPU, 'Proposed Operating Model Electric Vehicle Changing infrastructure Trial', (May 2025) [1].

²² Ibid [2.1.2].



- · Prices and charging specifications offered by eMSPs at given times
- Models trialled by CPU, including what aspects of the models worked and didn't work and why, including details of the eMSP(s) and how eMSP(s) were appointed
- The impact on EV adoption as a result of CPU's kerbside EV chargers (e.g. did it accelerate), however, we note that the small scale of the trial may make this difficult
- Charging and timing preferences
- Overall usage of CPU's kerbside EVCI

The final two categories of data above could be accompanied by social research to understand customer experiences, expectations and their considerations in the EV charging process. This research could include views from EV and non-EV owners in the areas in which the chargers are deployed.

In relation to the detailed financial and contractual data that the AER envisions that CPU could share, requiring CPU to publish this data will hinder CPU's ability to procure goods and services from the market at a competitive price. For example, a requirement to publish the prices CPU obtained for EVCI hardware would compromise future procurement processes. This information should remain confidential. Aggregated figures (e.g. at a project level) would be sufficient to demonstrate DNSP costs. Also, given the proposal is for a trial, CPU's costs may provide limited benefit to extrapolate to future regulatory scenarios.

Transparency of connection time data may be beneficial, however, connection times can be affected by a number of external factors that could lead to misleading data, particularly in such a small trial.

