



Response to the Victorian Parliament Inquiry: Electricity Supply for Electric Vehicles

Summary

EVX, welcomes the opportunity to provide this submission to the Economy and Infrastructure Committee's Inquiry into Electricity Supply for Electric Vehicles (EVs). As a national provider of public EV charging infrastructure with deep deployment experience in New South Wales (NSW) and Victoria (VIC), we offer a data-driven, evidence-based perspective on the harmonisation of electricity supply and demand with the accelerated deployment of EV infrastructure.

Our submission focuses on Terms of Reference items (1) through (4). In addressing these, we draw upon extensive data, case studies and policy engagements, including recent submissions to the Australian Energy Regulator (AER), the NSW Parliament, and our active projects co-funded by the Australian Renewable Energy Agency (ARENA) and NSW Government, delivering hundreds of kerbside, grid-responsive EV charge points, right now.

We will also discuss some of the challenges we have faced and continue to experience, in VIC, impeding an expeditious rollout of infrastructure. This is in stark contrast to the extraordinary pace of deployment that we have been able to achieve in NSW. We will make recommendations that we feel would significantly impact the pace and quality of infrastructure rolled out.

EVX will demonstrate in our submission the benefits of dynamic pricing and grid harmonization already being achieved across our charging network in NSW. This will particularly focus on tariff trials which during Citipower/Powercor/United Energy (CPU)s recent consultation on EV trial tariffs, said were not technically feasible based on the capability CPU currently possess. We will make recommendations as to where the VIC DNSPs can invest to deliver this fundamental capability that seems to be absent.

EVX will reveal the key roadblocks for Victoria and the impacts on consumer and investor confidence that DNSP proposals and regulator (AER) failures are having in VIC.

Finally, EVX will provide guidance to the committee on several other matters which are adding cost, complexity and having a significant effect on the market's ability to deploy more infrastructure, faster. We will provide **20 recommendations** including the creation of a contestable service provider scheme and the inclusion of contestable metering for public EV charging allowing for faster deployments in all areas for all connection sizes.



1. Strategies to Reduce EV Charging During Peak Demand and Increase Charging During Peak Supply

There is no technical or market justification for DNSP-led EV infrastructure programs to achieve demand response objectives. Dynamic load management, flexible pricing, and advanced controls are already actively deployed across NSW by independent providers such as EVX. For example:

- In Sydney, our kerbside EV charging network is integrated with tariff-responsive demand control, aligned with DNSP price signals. EVX offer off peak rates in dense residential areas.
- Trials such as the ARENA-funded EVX ChargeKonnnect project demonstrate how active and passive demand response at the EVSE level can be achieved using Open Charge Point Protocol (OCPP)-compliant hardware and software that are readily available and with minimal development to integrate with DNSP systems.

DNSPs proposing EV infrastructure projects under the guise of demand response ignore the fact that these systems are functioning today in competitive markets. Rather than invest ratepayer funds in duplicative and redundant trials, the Victorian Government should support DNSPs to invest in the infrastructure required to deliver dynamic pricing signals that private Charge Point Operators (CPOs) can respond to, as has already been achieved with EA964 (Ausgrid) and other trial tariffs in NSW.

During our most recent consultation with CPU, their representative has said “we do not have the technical ability to do that” when queried why they were not considering trials like EA964, such as “FLEXIBLE LOAD” tariffs already being done in NSW.

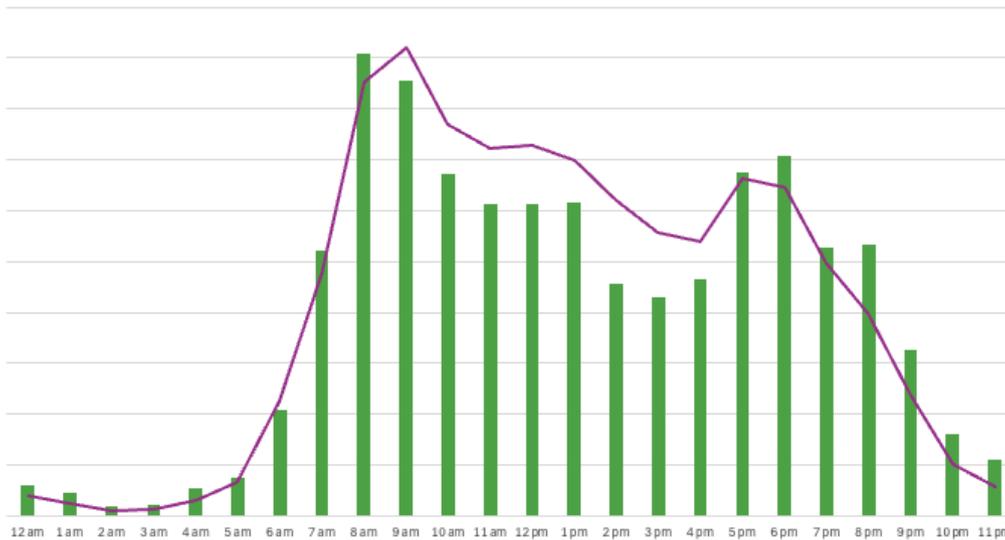
Instead of building EV chargers, which is a market ready and technology ready industry, DNSPs should spend that time and money to develop the systems and monitoring of their network that would allow for the kinds of innovation being delivered in NSW through flexible and dynamic tariffs.

Network failure to innovate and data share, particularly in VIC is having a significant impact on EV network deployment, investor confidence and consumer confidence in relation to purchasing EVs.

We can also provide data to the committee, particularly for kerbside EV charging in heritage and more dense areas of housing without off street parking. The data shows us most charging sessions, and the electrical load associated with those sessions is in fact delivered through the course of the day when we need that consumption. This is the data we see without any intervention, pricing or demand management from DNSPs.



CPU have not asked us to provide any of this data in determining their trial parameters, or during their tariff consultation. This data is collected though over 200 sockets, a deployment twice the size of their proposed trial. **EVX have significant data on the use case and over time which could be valuable to a genuine technical trial.**



EVX Time of Day Charging Data – Network Wide

What we feel will have the most significant impact on reducing peak demand is not DNSP led control of devices with no consumer incentives. It will be to flatten the evening peak between 4pm and 8pm and extend this into the night. This will be delivered by the service provider and without the need for technical intervention from the DNSP. Pricing from retailers will offer evening off peak rates after 9pm. These rates will be available to CPOs and infrastructure owners. CPOs and infrastructure owners can offer customers an “opt in” saving of up to 50% if they allow their session to be managed / commence after the evening peak should they intend to be parked in the space overnight anyway, regardless of when they plug in.

DNSP intervention is not likely to be “opt in” and could adversely impact end users and CPOs and without offering incentives to CPOs and end users for the inconvenience of having their sessions controlled.

Finally on this point. Ausgrid are already running a flexible load trial tariffs with a critical peak price (CPP). The key component CPU insists will deliver findings is already, in principle in place in NSW and delivering outcomes (next page). This trial proves that the proposed outcomes are already being delivered by the market using pricing mechanisms and technology already available. Below is an excerpt from Ausgrid’s own report discussing the impact and success of the trial so far:

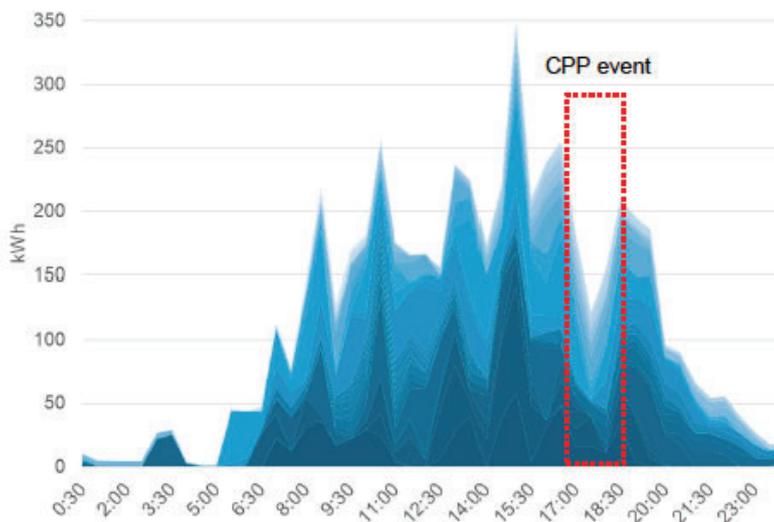
3. Flexible load with CPP

In July 2023 Ausgrid introduced its flexible load trial tariffs with a critical peak price (CPP). The main purpose of the trial is to better understand electric vehicle (EV) charging patterns with an event-based usage price. Separate residential and small business tariffs were introduced and each tariff allows up to 40 hours a year of CPP event time. Retailers are notified a day ahead of an upcoming event by email and/or SMS message.

The small business version of the trial is an ongoing success. As of February 28th, we have four retailers and 124 customer sites participating in the trial. The participating customers are EV charging facilities and include service station premises and pole mounted charging kiosks. Most of the charging locations are in inner Sydney suburbs including Leichhardt, Randwick, Woollahra and Waverley. In FY26 we will be encouraging our participating retailers to broaden the geographic coverage of the trial and include more customers on the NSW Central Coast and Hunter regions.

Since 1 July 2024 we have called 12 critical peak events with a total of 24 hours and these have occurred at times of high demand on the network. A review of the meter data from each event day shows that some customers are responding to the price signal, while others choose to continue charging (and have the CPP applied in the network charge billing to their retailer). The chart below shows the response from 75 EV charging customers on 27th December 2024, a day when the temperature in Sydney reached 37 degrees.

Chart 1. Energy usage by EA964 customers on 27 December 2024



We will continue to gather data from these event days to understand more about this customer behaviour. For example, we would like to know whether the vehicle owner sees the CPP, or whether it is managed by the retailer. We would like to understand whether two hours is long

Recommendations

1. **CPU ceases investment in publicly facing and duplicative infrastructure rollouts.**
2. **Combine flexible load tariffs and trials (DNSP) with already established commercial plans and products available to CPOs** (existing market) to deliver both flexible, critical peak demand response and regular evening peak demand flattening, happening in NSW already.
3. **VIC Government directs VIC DNSPs to review and report on their ability to introduce flexible load, critical peak load tariff trials** and provide the committee with a gap analysis where they are unable to provide this technical or tariff solution.
4. **VIC Government to mandate market structures that provide adequate incentives are provided to end users and electricity customers** for participating in load management, where DNSPs can avoid network costs and upgrades, customers must be rewarded.
5. **VIC Government outlaws the introduction of modulation and control of behind the meter devices including EV charging**, instead mandating the introduction of price incentives to achieve network outcomes.
6. **CPU should need to publish its desired trial outcomes and methods**, then consult the market on whether solutions already exist to achieve this before spending customers money on redundant trials and development.



2. Public Charging Infrastructure Rollout Sufficiency

Victoria lags other jurisdictions in the deployment of public EV infrastructure, particularly in kerbside applications. However, this is not due to market failure. Instead, it results from regulatory and commercial obstacles created by DNSPs and exacerbated by a difficult and complex connections process.

EVX and other providers have experienced multi-year delays finalising Facility Access Agreements (FAA) with some Victorian DNSPs. This has been recognised by the AER in both their recent draft regulatory determination and by them in their decision on CPUs ringfencing waiver request.

In what is a damning determination of the VIC DNSPs ability to effectively enable markets to deploy infrastructure, the AERs draft regulatory determination calls out this failure by DNSPs through the introduction of an entirely new class of services in this document:

[AER Determination](#)

DNSPs are now being forced to adhere to timeframes and to justify clearly, pricing of those negotiated services. These issues have had the single most significant impact on the speed and sufficiency of the rollout of kerbside infrastructure in VIC. The AER, despite approving the waiver request also specifically calls out negotiating with the competitive market as an issue that is being laid out as a condition of the waiver:

Waiver conditions and duration

To limit the potential competition risks associated with CPU's waiver, the AER has imposed the conditions below, which are also contained in the decision that we have published.

Trial conduct

1. Allow CPU to install up to 100 EV chargers of which at least 5% must be V2G chargers. CPU must maintain a publicly accessible, current register of the final list of the EVCI installations on its website. This should contain information on the address, e-MSPs available, charging speeds, V2G functionality, and other relevant information.
2. CPU must charge itself annual access fees equivalent to the annual median access fees charged to unrelated¹ third-party EV charging operators accessing its poles.
3. At the conclusion of the trial, CPU must elect to undertake one of the following options:
 - a) Seek a new ring-fencing waiver from the AER to continue operation of the EVCI until failure or decommissioning; or
 - b) Offer any EVCI that remains operational to contestable providers (for example, via competitive tender process), including access to the established charging site (subject to any applicable pole access rental charge); or
 - c) Uninstall any EVCI that remains operational.
4. Until the commencement of the forthcoming Victorian 2026-2031 regulatory reset period:
 - a) CPU must negotiate in good faith the terms and conditions of access to pole assets, for third-parties who seek access to CPU's poles.
 - b) CPU must publish on CPU's website(s) a negotiation procedure document for third-party pole access seekers and a standardised master FAA terms and conditions of pole access (including annual lease fees and other charges, with clear justification for its charges based on a cost-recovery basis with reasonable cost adjustments in providing pole access). This should include steps involved in processing kerbside EV charging connections and pole access requests, so that stakeholders have greater certainty about the application process. This is to ensure third party applicants have access to commercial information they may reasonably require to effectively negotiate with CPU.



The fact that the AER has now not only made regulatory determinations requiring networks to publish negotiation frameworks and included waiver conditions that require them to behave in a reasonable way, shows how a regulator is concerned and getting involved with the ongoing issues that the industry faces in VIC attempting to deploy EV charging.

These are not technical barriers; they are commercial ones.

In NSW, EVX have installed over 200 public charging ports across more than 100 locations in just 12 months, demonstrating the capability of the competitive market. In addition, we will deploy almost 300 further charge points before the EOFY this year. A significant escalation in our ability to scale public EV charging in just 12 months.

Installations that take a total of 4 hours to complete in NSW will take on average 6 weeks in VIC due to the protracted nature of the DNSPs connection process and lack of contestable service provider frameworks and metering in VIC.

We also note that in NSW, the State Government have introduced funding programs and support for CPOs and Local Governments wishing to participate in expanding kerbside EV charging. While the funding has been welcome and most impactful outcome from these programs has been the social license that it has provided to CPOs and Local Governments to work together towards achieving a specific goal, to expand access to public EV charging.

Under the program several hundred locations have been successfully deployed or are underway currently. Details of the program can be found here:

<https://www.energy.nsw.gov.au/business-and-industry/programs-grants-and-schemes/electric-vehicles/electric-vehicle-kerbside>

We highlight that where DNSPs in NSW have enabled clear access and cost-reflective pricing (as seen with Ausgrid, Essential Energy in NSW), infrastructure has been deployed at scale and with community support. Victoria can achieve the same outcome by eliminating DNSP-imposed commercial friction and aligning local councils, CPOs, and community needs by co-ordinating state led programs and guidance.

Additionally, we caution against allowing DNSPs to include EV charging infrastructure in their Regulated Asset Base (RAB). This risks crowding out private investment, distorting competition, and embedding monopoly control over an emerging, competitive sector.

Recommendations

7. **The VIC Government tightly monitor adherence of the DNSPs to the AER waiver conditions and regulatory frameworks and where possible bolster efforts to ensure a vibrant and competitive EV charging sector through state legislation.**
8. **Encourage local governments to engage with all market participants** to ensure the best consumer and Local Government outcomes when making decisions about deployment of public EV charging.
9. **Investigate the introduction of a contestable works program** or authorized service provider scheme so that CPOs have options when connecting to electricity networks in VIC rather than having to use one specified contractor engaged by the DNSP. Details of the NSW Scheme are here: <https://www.energy.nsw.gov.au/nsw-plans-and-progress/regulation-and-policy/asp-scheme-and-contestable-works>.
10. **Change metering regulations to allow small customers operating public infrastructure, who are covered under the general exemption order 2022** (<https://www.energy.vic.gov.au/about-energy/energy-licencing-exemptions/electricity-exemptions>) to install their own metering and engage with a third party Metering services providers.
11. **VIC Government mandate publishing of network capacity** mapping to better guide more expedient site selection.
12. **VIC Government consultation with Industry to determine issues and recommendations** to support better CPO and Local Government Engagement practices coupled with a review of the DNSP connection processes and commercial arrangements.



3. The Role of Electricity Distribution Businesses and Tariff Setting for EV Chargers

DNSPs have a clear and important role in enabling the EV transition by:

- **Providing transparent data on network capacity and building that capacity.**
- **Providing efficient connections to the network for customers.**
- **Collaborating on tariff structures for EV charging.**

They must not, however, extend their monopoly infrastructure role into downstream contestable markets, including ownership and operation of EV charging infrastructure. As outlined in both our submission to the AER opposing ring-fencing waivers and our NSW Parliamentary submission, allowing DNSPs to enter the EV charging market directly:

- Violates the principle of competitive neutrality.
- Results in cost cross-subsidisation and leverages shared staff and infrastructure.
- Reduces innovation and customer service quality.

Strangely, despite being the only CPO to have deployed pole mounted EV chargers in VIC, have VSIR approval and have a significant footprint in NSW, CPU have not approached EVX to discuss any of the learnings we may be able to provide to CPU for the purposes of their EVCI hardware and tariff / load control trials.

Maintaining sufficient capacity and structural integrity is the networks core role. CPOs cannot utilise the network for public EV charging if either the electrical capacity is constrained and/or the physical assets (poles and wires) are not up to scratch.

DNSPs have made repeated claims that they are well placed to own and maintain infrastructure to a higher standard than the competitive market. CPU have also claimed that during their trial that they intend to host multiple CPOs and have no intention of interacting with the consumer.

EVX would be gravely concerned where the asset owner is the DNSP and service provider to the customer a separate entity all together. The publicly facing service provider will have no control over uptime, quality or service and will need to lodge customer complaints and technical requests from consumers with CPU rather than arranging for technicians themselves to attend site in a timely manner. CPOs are often vertically integrated because of the nature of providing customer interfacing infrastructure. CPOs are also highly responsive to technical advancements and opportunities for collaboration and industry development.

In NSW 10-15% of locations are knocked back by the DNSP for lack of electrical capacity or deterioration of the physical pole (asset) that is proposed. In VIC this is 40%-50%. VIC DNSPs have a critical role to play, getting the network up to standard / ready for the EV transition. Currently CPU fails that test when compared to their interstate counterparts.

Recommendations

13. **The VIC Government works with industry to monitor progress of deployment of both CPUs waiver sites and that of the competitive market** to establish and ensure competitive neutrality and discuss results of the public EV charger rollout at regular intervals.
14. **The VIC Government undertake a review of the claimed benefits and learning of the CPU trial** in the absence of proper enforcement of ringfencing rules by the AER. The Victorian Government must now step in to protect Victorian customers and industry.
15. **The Victorian Government undertake a full review of electricity network readiness to adequately support the transition of transport to electric vehicles.** Reviewing network capacity and readiness, network spending and constraints and open a line of inquiry where industry can feedback to the Victorian Government, failures to provide network access in a reasonable timeframe and at a reasonable cost.
16. **Legislate that Victorian DNSPs must provide at a minimum, guaranteed connections below a certain size threshold** at any location within a timeframe at no grid augmentation cost to customers and CPOs. Above a certain threshold develop a set of KPIs on time and cost.



4. Strategies to Facilitate the Take-up of EV Ownership, Including the Facilitation of Bidirectional Charging

Facilitating mass EV adoption requires a focus on accessible infrastructure and innovation that supports flexible energy usage, particularly for residents without off-street parking.

The ARENA-funded EVX ChargeKonnekt Kerbside EV Charging Project is a landmark initiative that addresses these challenges. This project will see 250 dual-port 22kW AC chargers installed across 60+ local government areas in NSW, Victoria, and South Australia. These units are pole-mounted and grid-integrated, optimising available infrastructure while enabling load flexibility and responsiveness to dynamic pricing signals.

Details of the project can be found here:

<https://arena.gov.au/projects/evx-chargekonnekt-kerbside-ev-charging-project/>

Projects like these are a critical pre-cursor to widespread deployment and adoption of V2G technologies. Customer responsiveness and participation in dynamic pricing are critical to familiarise EV drivers with concepts like V2G and how they can benefit. The first step however to enabling V2G and ensuring that those technologies are adopted by end users is to ensure adequate infrastructure exists in order to drive uptake. Secondly the tariffs must exist and be relevant and proportionately rewarding for customers when they are offered to the market.

The key issue we see in VIC in terms of EV infrastructure, appetite to install, DNSP engagement and consumer confidence, is a lack of social license, driven by a lack of government support and increased dominance in messaging from the likes of CPU and the ENA. Repeated proclamations of market failure against the backdrop of an un-cooperative and difficult environment for deployment of EV charging.



Recommendations

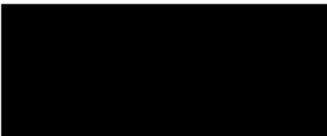
17. The development of VIC government EV resources for consumers, local government and industry. Including information for EV drivers, support for industry and local government. **The Development of a cohesive VIC EV strategy.** Link to the NSW EV strategy here: [NSW EV Strategy](#).
18. **Consultation with industry participants and consumers** in order to structure adequate incentives and planning tools for infrastructure and EV adoption.
19. **Introduction of non-monetary and/or grant based incentives** for local governments and businesses to help facilitate public EV charging in partnership with CPOs. Examples of this include: [Destination Grants](#) & [Kerbside Grants](#).
20. **Establish a state-wide framework for local governments** to allocate dedicated public EV parking to ensure functional and accessible charging infrastructure.

Conclusion

EVX makes these 20 recommendations based on our deep experience unlocking significant investment and social license in NSW, installing and now operating over 200 public kerbside charge points across NSW and VIC. We have also had experience now navigating different regulatory, commercial and local government landscapes over the last few years in both states.

The Victorian Government have an opportunity to unlock significant investment in the state by unblocking impedances to investment, creating more opportunity and to replicate the success of various programs interstate.

Andrew Forster



CEO - EVX

EVX Australia Pty Ltd



evx.tech