Submission No 42

Infrastructure for electric and alternative energy source vehicles in **NSW**

Organisation: Nexa Advisory

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2 May 2025

Ms Lynda Voltz MP Chair, Legislative Assembly Committee on Transport and Infrastructure Parliament of New South Wales Macquarie Street Sydney NSW 2000

Lodged electronically

Dear Ms Voltz,

Inquiry into Infrastructure for electric and alternative energy source vehicles in NSW

Nexa Advisory welcomes the opportunity to contribute to the Inquiry into infrastructure for electric and alternative energy source vehicles in New South Wales (the Inquiry), led by the Legislative Assembly Committee on Transport and Infrastructure (the Committee).

Nexa is an advisory firm with an unwavering focus to accelerate the clean energy transition in a way that provides secure, reliable, and affordable power for consumers of all types. Nexa Advisory is a team of experienced specialists in the energy market, policy and regulation design, stakeholder engagement, and advocacy. We work with public and private clients including renewable energy developers, investors and climate impact philanthropists to help them get Australia's clean energy transition done.

Introductory remarks

We have previously discussed that the uptake of electric vehicle (EV) infrastructure is a critical enabler of Australia's broader emissions reduction and energy security objectives¹. With the introduction of the New Vehicle Efficiency Standard (NVES)2, the Federal Government's National Electric Vehicle Strategy (NEVS)³, and the New South Wales Government's updated Electric Vehicle Strategy, there is now a clear and growing momentum to accelerate EV adoption.

Overcoming barriers in EV uptake is critical for achieving Australia's emission reduction goals, given that vehicles contribute to about 13 per cent of the country's greenhouse gas emissions⁴. Advocating for policies to support the EV transition is pivotal for addressing climate concerns and economic pressures, particularly in a way that is equitable, competitive and consumerfocused.

¹ Nexa Advisory, Submission on the Transport and Infrastructure Net Zero Consultation Roadmap, July

² Nexa Advisory, Submission on the New Vehicle Efficiency Standard – Consultation Impact Analysis, March 2024

³ Nexa Advisory, Submission on the Inquiry into the transition to electric vehicles, March 2024

⁴ Australian Government, Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Cleaner, Cheaper to Run Cars: The Australian New Vehicle Efficiency Standard, February 2024



The key objective of this Committee should be to consider the how competitive dynamics are supporting consumer outcomes across the delivery of EV infrastructure – namely public EV chargers - across New South Wales.

There is a considerable risk of monopoly electricity network businesses encroaching into the competitive market of EV charging infrastructure which the New South Wales Government must urgently address.

Nexa Advisory has consistently raised concerns about the challenges that third-party EV charging infrastructure providers face when connecting to electricity networks, particularly Distribution Network Service Providers (DNSPs)⁵. These include significant delays in securing connections, a lack of transparency and access to network data and inflexible tariff structures, which can result in costly project delays and inhibit the economic viability of charging infrastructure projects. In particular, the application of inflexible 'traditional' tariff structures for public EV charging remains a key barrier to public charging providers developing commercially viable projects⁶.

Additionally, the absence of publicly available hosting capacity data entrenches the advantage of DNSPs over competitive third-party providers.

These obstacles are the direct result of the current governance and regulatory framework favouring incumbent DNSPs, limiting the evolution and competitiveness of new entrants and the development of consumer-centric technology solutions. We have previously discussed that despite the monitoring efforts by the Australian Competition and Consumer Commission (ACCC) and AER, there is a gap in the monitoring efforts of competition and innovation of Consumer Energy Resources (CER) – including EV infrastructure.

Additionally, recent waivers granted by the Australian Energy Regulator (AER) have allowed DNSPs to exploit their regulated monopoly positions to compete with third parties, communities and consumer energy service providers⁷.

This is despite the poor track record and missing incentives for these businesses to efficiently deliver the best outcomes for consumers in these services. This has been evidenced through the recent Community Batteries for Household Solar program, for which the AER granted a Class Waiver for DNSPs8. In the assessment of the program - which was administered by the Australian Renewable Energy Agency (ARENA) – it was found that "network batteries were more expensive on average than non-network (behind-the-meter) batteries" with a weighted average cost of \$2,300 compared to \$1,330 per kWh (\$2,240 vs \$1,270 per kWh unweighted)', where weighted by the number of batteries across projects. This reflects that services provided by

⁵ Nexa Advisory, Accelerating Consumer Energy in Australia, April 2024

⁶ Evie Networks, <u>Submission on NSW DNSPs' 2024-2029 Pricing Proposals</u>, May 2023

⁷ AER, AER grants trial waiver for innovative kerbside EV chargers, 6 March 2025

⁸ AER, Batteries funded under the Commonwealth Government's Community Batteries for Household Solar Program - Ring-fencing class waiver, February 2023



regulated monopoly businesses are inherently less consumer-centric than those provided by competitive markets.

This not only disadvantages third-party proponents but also risks slowing the pace of EV infrastructure deployment across New South Wales, undermining broader decarbonisation and electrification objectives.

Summary of recommendations

To address these challenges, we strongly urge the New South Wales Government to:

- 1. **uphold and reinforce ring-fencing obligations** to ensure that regulated DNSP businesses cannot own EV charging infrastructure and other assets which can be delivered competitively; and
- 2. strengthen data transparency obligations through DNSP licencing arrangements, requiring DNSPs to publish network data relevant to hosting capacity, congestion and constraint locations to level the playing field for competitive third-party providers – as well as within infrastructure planning undertaken by local councils and community groups.

We have also previously called for an independent review into the role of performance of distribution networks⁹, and consider this is relevant context for the scope of the current Inquiry. This would assess:

- the role of DNSPs in facilitating the energy transition;
- the ability of DNSPs to adapt their business models to facilitate the integration of CER; and
- whether existing governance arrangements and regulatory oversight ensure value for energy consumers.

The remainder of our submission further details the abovementioned challenges and recommendations.

Maintaining competition through strong ring-fencing protections

A key area of concern for this Inquiry is the regulation and governance of infrastructure to support electric and alternative energy vehicles, including the role of DNSPs and the importance of maintaining market competition.

DNSPs will play a critical role in facilitating the electricity infrastructure that underpins EV charging, as well as broader integration of CER. However, without proper regulatory safeguards, DNSP involvement in contestable markets such as EV charging infrastructure or energy storage risks distorting competition and reducing innovation.

⁹ Nexa Advisory, Submission on the Select Committee on Energy Planning and Regulation in Australia, October 2024



The benefits of competition

Critically, all aspects of EV charging infrastructure are contestable and open to competition, supported by strong and effective monopoly regulation of DNSPs to ensure open access to the network and regulated assets owned by DNSPs which are ultimately paid for by consumers.

Competition is the single most effective way to give New South Wales EV drivers abundant, affordable and user-friendly charging infrastructure. International evidence shows that when multiple charge-point operators can invest on equal terms, rollout is faster, costs are lower and service quality is higher¹⁰.

Conversely, DNSP-led deployment inherently lacks the service and cost incentives for efficient and consumer-centric delivery of EV charging infrastructure. This gives rise to the need for economic regulation of price, service and access for distribution networks, as well as ringfencing to ensure regulated monopoly businesses do not exploit their position adjacent unregulated markets, like public EV charging.

The need for ring-fencing

The rapid deployment and evolution of CER, enabled by competition and innovation in the provision of these products and services, is driving the decentralisation of our energy system. This decentralisation is challenging the traditional role and business models of DNSPs.

In response, these regulated monopoly businesses have presented CER as a problem and sought to benefit from owning these assets themselves. This has seen the weakening of regulation which they are subject to - in particular 'ring fencing' arrangements – which allows these businesses to encroach on competitive markets.

The objective of the Ring-fencing guideline (electricity distribution) (the Guideline) is to:

- promote the National Electricity Objective by providing for the accounting and functional separation of the provision of direct control services by Distribution Network Service Provider's (DNSPs) from the provision of other services by them, or by their affiliated entities.
- promote competition in the provision of electricity services¹¹.

The Ring-fencing framework prevents DNSPs from cross-subsidising contestable activities with revenue earned from electricity customers from regulated services.

Further, the Guideline operates to ensure that the regulated electricity DNSPs do not exercise their monopoly powers by separating regulated activities from competitive business activities,

¹⁰ U.K. Government, Department of Transport, Government response to the CMA's Electric vehicle charging market study, March 2022

¹¹ AER, Ring-fencing Guideline Electricity Distribution, February 2025



to support competitive markets. However, this framework is currently being eroded by waivers granted by the AER for community batteries and EV charging infrastructure¹².

In our submission to the AER on the proposed Ring-Fencing Class Waiver for Community Batteries¹³, we strongly opposed the AER's class waiver for DNSPs, which we consider set the wrong precedent for distributed and consumer energy resources (including EV charging infrastructure) which can and should be delivered competitively.

The AER itself acknowledged in its Ring-Fencing Guideline that DNSP-led projects without sufficient controls could "risk the foreclosure of other players" and would "not be in the longterm interest of consumers"14.

Moreover, DNSP ownership and operation of community batteries and charging infrastructure without proper ring-fencing or transparency - limits the realisation of the full value stack of services these assets can provide.

This has been seen historically through the DNSP-led smart meter rollout in Victoria. In this case, the delivery of otherwise competitive services resulted in adverse outcomes including a lack of innovation, cost-effectiveness, competition and consumer choice¹⁵.

As such, we consider that third-party providers are better placed to deliver these services competitively and innovatively.

Recommendation 1: uphold and reinforce ring-fencing obligations

The New South Wales Government must actively support the AER to uphold ring-fencing arrangements and clarify their application to encompass local network services – including non-network infrastructure such as public EV chargers – to ensure regulated DNSP businesses cannot own EV charging infrastructure and other assets which can be delivered competitively.

Network data transparency is needed to maximise benefits to ensure competitive neutrality

DNSPs possess monopoly access to critical network data, including locational information and hosting capacity constraints which is critical to the integration of distributed and consumer energy resources – including EV charging infrastructure. However, third parties do not have adequate access to the network data needed to support delivery of third party-owned infrastructure.

¹² AER, Decision - Ring-fencing Class Waiver for Batteries funded under the Community Batteries for Household Solar Program, February 2023

¹³ Nexa Advisory, Initiation notice - Ring-fencing class waiver Community batteries funded under the Commonwealth Government's Community Batteries for Household Solar Program, January 2023

¹⁴ AER, Electricity distribution Ring-fencing Guideline Explanatory Statement, November 2021, p.30

¹⁵ Victorian Auditor-General's Report, Realising the Benefits of Smart Meters, September 2015



The current role of DNSPs to identify and forecast distribution network need, with no requirement to share that network data with other market participants, means that it is not possible to identify where and how non-DNSP-led investments (such as EV charging infrastructure) could offer value.

The Distribution Annual Planning Report (DAPR) and the Energy Networks Australia "Network Opportunity Maps" (based on the DAPR) do not provide sufficient, publicly available, up to-date data to underpin the development of third-party CER resources – particularly EV chargers, where the connection location and configuration forms a key input to the business case.

This information asymmetry benefits the DNSP, creating the potential for discrimination against third parties, because the limited access to network data impacts third parties' ability to develop viable battery or EV charging projects¹⁶.

Even with regulatory safeguards, this may remain a risk due to market structures and broader network regulatory arrangements. For example, this asymmetry limits the ability for third parties to negotiate around the connection of their project (e.g., EV charging infrastructure) to the distribution network. This discrimination is difficult to demonstrate under the current arrangements, and therefore difficult to enforce through regulations (e.g., ring-fencing provisions).

Without addressing this issue, DNSPs will continue to benefit from this asymmetric information, undermining the ability for non-DNSP businesses to deliver assets competitively, maximising the value for consumers as well as benefiting the network.

Recommendation 2: strengthen data transparency obligations through DNSP licencing arrangements

The New South Wales Government must reform jurisdictional DNSPs licencing arrangements to embed stronger obligations on network information and data sharing – across both operational and planning horizons.

This would see DNSPs publish network data relevant to hosting capacity, congestion and constraint locations to level the playing field for competitive third-party providers – as well as within infrastructure planning undertaken by local councils and community groups.

Embedding these obligations would also support improved joint planning of the electricity network – between DNSPs and the Australian Energy Market Operator through the DAPR. This would provide greater transparency and improve this existing planning framework.

¹⁶ AER, Ring-fencing Guideline Explanatory Statement (Electricity distribution) Version 3, November 2021, p.33



Thank you for the opportunity to provide a submission to the Inquiry. We welcome the	he
opportunity to further discuss any aspect of our submission - please contact either	myself o
Jordan Ferrari, Director - Policy and Analysis,	

Yours Sincerely,

Stephanie Bashir CEO and Principal Nexa Advisory