Submission No 34

INFRASTRUCTURE FOR ELECTRIC AND ALTERNATIVE ENERGY SOURCE VEHICLES IN NSW

Organisation: The Australian Energy Market Commission

Date Received: 1 May 2025

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2 May 2025

Ms Lynda Voltz, MP
Chair, Legislative Assembly Committee on Transport and Infrastructure (NSW)

Dear Ms Voltz,

Submission to Inquiry into infrastructure for electric and alternative energy source vehicles in NSW

The Australian Energy Market Commission (AEMC) welcomes the opportunity to provide a submission to the NSW Legislative Assembly Committee on Transport and Infrastructure's Inquiry into Infrastructure for electric and alternative energy source vehicles in NSW.

The AEMC is an independent statutory body that works for Australia's future productivity and living standards by contributing to a decarbonised, affordable and reliable energy system for consumers. We make rules, conduct reviews, and provide advice to governments on Australia's electricity, gas and energy retail markets. We are one of three market bodies that report to the Energy and Climate Change Ministerial Council through the energy ministers.

The Inquiry's consideration of funding and location of electric vehicle (EV) chargers is timely. It aligns with the AEMC's focus on fostering rapid vehicle electrification and supporting consumer energy resources (CER) under our vision for a consumer-focused net zero energy system.

As the transport sector is currently Australia's third largest source of emissions at 21% of total emissions, electrification of transport is key to achieving net zero. As well as reducing emissions, the benefits of increased EV uptake include improving reliability, enhancing grid management and reducing overall power system costs.

The availability of EV charging infrastructure can be a barrier to increased EV uptake. Australia trails behind most of the world in rolling out EV charging infrastructure. In its *Global EV Outlook 2024*, the International Energy Agency found that Australia has 68 EVs per public charger compared to the rest of the world at 11 EVs per charger. Charging infrastructure needs to be conveniently located and equitably distributed to support the necessary acceleration of EV uptake.

A collaborative approach is needed between governments (including local government), market bodies and industry for a faster and more coordinated rollout of publicly accessible EV charging infrastructure. Kerbside, destination and highway fast charging are to a large degree separate markets, and the optimal policies for supporting infrastructure roll-out are likely to vary across each use-case.

The preferred approach would also strike the balance on who bears the cost of charging infrastructure. We recognise that EV owners and users directly benefit from charger availability, although we also note that all consumers would benefit to some extent from increased EV uptake through grid coordination that could reduce system costs and from a lower emissions energy system.

Our role will be to help identify which approaches to charging infrastructure are in the long-term interests of consumers and, if necessary, consider any changes to ensure the energy regulatory framework can facilitate the rapid electrification of vehicles.

Thank you for considering our submission and please let us know if we can provide further support to the Committee on its Inquiry.

Yours sincerely

[redacted]

Anna Collyer

Chair, Australian Energy Market Commission