Collaboration on Energy and Environmental Markets

UNSW SYDNEY

23 July 2026

Australian Energy Market Commission
Level 15/60 Castlereagh St,
Sydney NSW 2000

Re: Electricity network regulation review – Package 1

Dear AEMC,

I commend the AEMC on this review. It is very timely to consider electricity network regulation as the roles and expectations of Network Service Providers (NSPs) are renegotiated as part of the evolution of the energy system in response to mounting environmental and inequality pressures and the stressing of social license.

My attached submission makes high level comments on the proposed central policy area 1 'What services do we need networks to provide in the future?'. I will have more specific comments to make on central policy areas 2-4 in Package 2.

In regards to the specific case of DNSP roles in Electric Vehicle Charging Infrastructure, I have attached my submission to the recent 'Facilitating EV charging infrastructure rollout ...' rule change process, which in turn highlights findings from our research at UNSW in partnership with Waverley, Woollahra, Randwick councils.

As always, I would be more than happy to discuss any of these important and interrelated issues further.

Kind Regards,

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Services we need networks to provide in the future

Core to networks are the services of operating and maintaining the physical, organisational and, increasingly, digital infrastructures to transmit electricity.

Networks may also provide a range of adjacent services, which is where questions of network regulation become more ambiguous. There are at least two pertinent factors to consider when assessing the bounds of network service provision. Firstly, for what services is monopoly operation advantageous, overall, to competitive operation. And secondly, for which of these are NSPs the best choice of monopoly.

Focussing on the case of Electric Vehicle Charging Infrastructure (EVCI), there is a plausible, but yet to be proven, argument that the advantages of deploying and maintaining charging hardware under monopoly model outweigh the disadvantages.

Advantages of a monopoly approach may include efficiency of deployment, reliability of maintenance, and competitive open access to retailers. Such advantages are supported by the contrasting experience of competition in metering creating inefficiencies and barriers to retail competition.

It is important to note that NSPs are not the only monopoly that could play this role, and that the potential for Australian NSPs to deliver speed and cost efficiencies is yet to be proven. It is noteworthy that the Californian Public Utilities Commission pivoted away from utility ownership of EV charging infrastructure in 2022 after such efficiencies were not being delivered[1]. One factor in this may be NSPs limited resources, which in the Californian experience were deemed to be better focused on the core network service of managing EVCI network connection applications.

In terms of whether NSPs would be the best monopoly to deliver and maintain EVCI, were a monopoly the preferred service model, our research suggests that the role of NSPs would have to be bounded. In particular, there would be major challenges and risks to having NSPs involved in setting the scale and speed of EVCI deployment or selecting specific sites. These aspects require a more holistic assessment of public policy and public benefit, at a national level, and bottom-up consideration of and consultation with local communities at the neighbourhood and street level. Our research emphasises that EVCI are less like streetlights – which were rolled out uniformly across every street, in no small part to provide a baseload to the electricity system – and more like traffic lights – for which electricity is a minor factor relative to their impacts on the streetscape. For EVCI, the rubber hits the road with parking restrictions, rather than electricity tariffs.

[1] https://www.publicpower.org/periodical/article/calif-puc-proposes-decision-funding-behindmeter-ev-charging-infrastructure

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Given this constraint on the potential role of NSPs, it may be worth exploring the possibilities for other monopoly organisations, including governments, to manage the process from network planning to charger operation. This too requires further analysis, as it may well be that NSPs provide a preferrable set of services due to their adjacent capabilities in managing electrical infrastructure along streets.

Stepping back from the immediate topics at hand, it is important to recall, respect and reinforce the role of networks as wires that bind society together. Postage stamp pricing for network services has been a clear, long-standing expression of this. As the roles of NSPs evolve as part of the transition, it is critical that this evolution enhances the shared social contract.

As noted in the attached articles, directing costs and risks to electricity consumers via NSPs – rather than recouping them from EV drivers or socialising them through progressive taxation – rather erodes this contract. I look forward to discussing this in detail in ENRR Package 2.

For more detailed discussion of these points, please see:

- Fast, fair and future-proof: kerbside charging for the public good https://www.ceem.unsw.edu.au/sites/default/files/documents/202605%20-%20Fast%2C%20fair%20and%20future-proof%20-%20kerbside%20charging%20for%20the%20public%20good.pdf
- Submission to AEMC consultation on the Facilitating EV charging infrastructure rollout under Commonwealth grants rule change https://www.ceem.unsw.edu.au/publications?field_publication_type_target_id%5B%5D=2&field_research_area_target_id=All&combine=&field_date_value=&sort_by=&sort_order=
- Response to Saul Griffith's Quarterly Essay, "The Wires That Bind" https://bjornsturmberg.com/response-to-saul-griffiths-the-wires-that-bind/