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Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235 aemc@aemc.gov.au

Dear Madam / Sir:

ENERGY MARKET ARRANGEMENTS FOR ELECTRIC AND NATURAL GAS VEHICLES

Thank you for the opportunity to respond to the above-mentioned issues paper.

Horizon Power is Western Australia's regional and remote electricity provider.

Horizon Power operates outside the Western Australian Energy Market (WEM), mentioned on page 57 of the issues paper, and as such may encounter different challenges and benefits associated with electric vehicles from those that would accrue to Western Power, or to the other electricity market participants in Western Australia.

We are a State Government-owned, commercially-focused corporation that provides power to about 43,000 customers (comprising more than 100,000 residents and 9,000 businesses, including major industry) across regional Western Australia.

Horizon Power is a unique energy utility in that it is responsible for the generation, procurement, distribution and retailing of electricity supplies.

Horizon Power manages two major interconnected systems, the North West Interconnected System (NWIS) in the Pilbara and the interconnected transmission network between Kununurra and Wyndham, as well as 36 non-interconnected or islanded systems in regional towns and remote communities.

We serve every part of the State outside the south west corner—2.3 million square kilometres covering the Kimberley, Pilbara, Gascoyne, Mid West and Southern Goldfields (including Esperance, Norseman and Hopetoun) regions.

The NWIS is an unregulated system, meaning planning and development take place in a relatively uncoordinated fashion. This has implications for the adoption and spread of new technologies like electric vehicles, in particular around technical standards and network management.

As noted in the previous round of submissions, the full value to consumers of EV infrastructure would not be achieved without advanced metering infrastructure (AMI), through its influence on consumer behaviour, and there are many policy matters concerning AMI that remain unresolved. Horizon Power encourages the exploration of matters concerning EV infrastructure to be linked to ongoing discussions of AMI and associated policy.

Horizon Power's non-interconnected towns are in the main small and fairly isolated. Whilst extensive adoption of EVs in remote towns is unlikely because their range is limited, some towns, particularly those with local tourism, could be candidates for significant uptake in the medium term. Some of Horizon Power's non-interconnected towns are experiencing network constraints, and the degree to which EV infrastructure could exacerbate or improve these is not yet known. The network impacts of electric vehicle use in non-interconnected systems, such as those in Horizon Power's network, should be studied.

As the issues paper points out, the implications of regulated retail pricing must be thoroughly examined within each jurisdiction before electric vehicle charging infrastructure is deployed at scale. The cost to serve non-interconnected towns may vary widely, so the design of price signals (and the regulatory regimes within which they sit) may also need considerable flexibility in order to maximise the benefit of EV systems.

We would welcome the opportunity to participate in further consultation on electric vehicle systems, in order to improve the collective understanding of EVs and their impacts on the WA electricity industry, as well as to foster their use.

Should you have any questions about the matters raised in this submission, or if Horizon Power can facilitate further discussion, please contact Horizon Power's policy manager, Brenna Pavey, on (08) 6310 1865 or at <u>brenna.pavey@horizonpower.com.au</u>.

Yours sincerely,

DAVID TOVEY MANAGER, EXTERNAL AFFAIRS