

CEC SUBMISSION TO THE AEMC ISSUES PAPER, '2020 RETAIL ENERGY COMPETITION REVIEW: ELECTRIC VEHICLES'

Executive Summary

The Clean Energy Council (CEC) welcomes the opportunity to provide feedback on the Issues Paper on electric vehicles (EVs) for the Australian Energy Market Commission (AEMC) 2020 Retail Energy Competition Review.

The CEC is the peak body for the clean energy industry in Australia. We represent and work with hundreds of leading businesses operating in solar, wind, hydro, bioenergy, geothermal energy, energy storage, electric vehicles and energy efficiency along with more than 6,600 solar installers. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

CEC members report that the barriers to market participation by bidirectional EV chargers are not unique to EVs and apply equally to behind the meter storage. In the absence of further energy market reform, very little market participation by bidirectional EV chargers is anticipated, apart from demand response.

We would be very happy to discuss this and related issues in further detail with the AEMC. We look forward to contributing further to this important area for policy development.

Responses to questions raised in the Issues Paper

Context

1. Are there any other contextual developments the Commission should consider in relation to EV uptake and use in Australia?

In order to reduce transport emissions to zero (or close to zero) no later than 2050 it will be necessary to move to a zero-emissions energy carrier – most likely either electricity or hydrogen. Hydrogen fuelled vehicles would most likely use batteries powered by fuel cells. The prospects for hydrogen vehicle commercialisation are uncertain at this stage.

We understand that bidirectional EV chargers (also known as vehicle-to-grid (V2G) EV chargers) will be available on the Australian market later this year.

Role of retailer

2. What challenges and opportunities, given the current role of retailers in the NEM, are EVs likely to provide retailers?

With the appropriate market framework in place to reward customers for the value of the services their EVs can provide, retailers will be able to structure a retail offer according to the business strategy. However, under the current market framework very little market participation by bidirectional EV chargers is anticipated, apart from demand response.

Electricity retailers have so far largely been unsuccessful in shifting customer demand patterns (e.g. using time-of-use tariffs) and retail electricity is mostly consumed on a convenience basis. EVs could bring about a steep load shift in coming years and tariff reform needs to be considered by distribution network service providers (DNSPs) and electricity retailers. The slow pace of the rollout of advanced metering infrastructure could present a significant barrier to moving towards cost-reflective tariffs for home EV chargers.

Regulatory environment

3a. Do you consider that regulatory changes, like multiple trading relationships, that improve a consumer's ability to engage with multiple FRMPs at a household would enable innovative services and products to develop for EV customers?

Allowing multiple trading relationships (MTRs) would increase demand for DER-related products and services, such as EV charging. Access to MTRs would increase retail competition and remove market barriers to new entry. It is likely it would also encourage innovation in services and new technology offers to consumers. However, it will be important to manage the reforms in a way that does not result in unwanted complexity for consumers. A cost benefit analysis of the MTR reform proposal would assist considerations.

We acknowledge the analysis previously undertaken by the Commission, including *AEMC 2016, Multiple Trading Relationships, Final Rule Determination, 25 February 2016*, which concluded that the overall costs of allowing MTRs through a single connection point would outweigh the benefits. The report suggested that the issues could be resolved through cost reflective network pricing, contestable metering or private and off market arrangements. However, the experience since 2016 suggests otherwise. The pace of the rollout of advanced metering infrastructure since 2016 has been extremely disappointing and is a barrier to reforms and new business models that are relevant for EV consumers.

Residential charging

4a. Are there any offers in the retail market, or are you developing any others, aimed at EV consumers?

CEC is an industry association and we have no plans to develop commercial offers in the retail market. As noted in the Issues Paper, AGL, Origin Energy and Powershop have offers in the Australian retail market targeting EV consumers.

4b. Are there retail market barriers in developing residential products and services for EV consumers?

CEC members report that the barriers to market participation by V2G EVs are not unique to EVs and apply equally to all other behind the meter technologies. In the absence of further energy market reform, very little market participation by V2G EVs is anticipated, apart from demand response.

Non residential charging

5a. Are you providing or developing any non-residential charging products and services?

CEC is an industry association and we have no plans to develop commercial offers in the non-residential retail market.

5b. Are there retail market barriers in developing non-residential EV charging products and services?

As noted above, CEC members report that the barriers to market participation by V2G EVs are not unique to EVs and apply equally to other behind the meter technologies. This applies to non-residential and residential charging products, and other technologies. In the absence of further energy market reform, very little market participation by V2G EVs is anticipated, apart from demand response.

The glacial pace of the rollout of advanced metering infrastructure is a matter of concern and could be an impediment to cost reflective pricing for EV consumers. Most of the smart meter rollout strategy appears to rely on mandating smart meters for solar PV installations and new connections. There is no requirement for smart meters to be installed along with all new EV chargers.