EVC response to the AEMC Draft determination – Unlocking CER benefits through flexible trading

February 2024

With reference to:

Unlocking CER benefits through flexible trading (retail) | AEMC

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Preamble

The Electric Vehicle Council (EVC) is the national body representing the electric vehicle industry in Australia. As the market is emerging in Australia, our work is particularly aimed at increasing certainty for investment through policy, knowledge sharing and education.

The Australian Energy Market Commission (AEMC) is the rule maker for Australian electricity and gas markets. They make and amend the National Electricity Rules, National Gas Rules and National Energy Retail Rules. They also provide market development advice to governments.

This consultation relates to a proposed amendment to enable consumers to separate out 'CER' – Consumer Energy Resources – from the balance of the loads in the home, for the purpose of these 'CER' being able to participate in potential new services.
Electric Vehicles (EVs), their charging apparatus (EVSE), and the future potential of vehicle to grid (V2G), are relevant to this proposed rule change.

The EVC welcomes ongoing discussion on this matter, and can be reached at office@evc.org.au

Our previous submissions to unlocking CER benefits through flexible trading are here

EVC response to ERC0346 – unlocking CER benefits through flexible trading directions paper - Electric Vehicle Council

Ross De Rango - Electric Vehicle Council

Introduction

The EVC sees a future where small customers with EVSE can participate in network service markets however, the largest benefit available, participation in the wholesale market, can already be enjoyed through currently existing frameworks, such as VPPs and retail offers like Amber. Although the results of the Energeia cost-benefit analysis show a small overall benefit, a large proportion of it is assigned to network visibility from a secondary NMI. The benefits of this should not be overstated through the lens of the AEMC target of 100% smart meter roll out by 2030, which will provide all of the visibility networks require. It may be of use to some in future to have secondary NMIs and in-built meters in devices but these are not required in the short term and will benefit few.

Large customers such as charge point operators (CPOs) trying to deploy high power chargers in shopping complexes will likely benefit from the proposed rule change.

Large customers

The EVC supports the provision of a more appropriate and enduring framework to enable a second national meter identifier (NMI) for large customers, rather than leveraging the embedded network (EN) framework.
The EVC has been vocal in its support for ENs to remain an option in the car parks of apartment buildings due to the ease of EVSE installation, as you can read here. Whilst small customers with EVSEs under an EN structure can take their EVs elsewhere to charge if they're not happy with the service, CPOs wishing to deploy chargers in shopping complexes under an EN structure have no choice of retailer and therefore limited exposure

to competitive retail offers.
Secondary NMIs with the ability to have more than one FRMP will aid CPOs to deploy in this situation.

The draft determination mentions that large customers can engage multiple energy service providers by establishing two connection points to the distribution network. The AEMC will be aware of the resistance from DNSPs in Qld and Vic when a second connection is being sought within a certain distance of the first. This is causing problems for CPOs wishing to deploy fast charging to suitable retail outlets like petrol stations and retail premises without incurring high costs and inconvenience to the site owner in utilizing the existing connection. More information on second lines of supply here.

Small customers

CER such as EVSE, particularly V2G capable EVSE, could be an important contributor to the grid of the future and secondary NMIs may be an enabler of the most efficient use of that CER, however the EVC supports that the installation of EVSE with in-built metering will be voluntary. The lion's share of benefit can be derived from mechanisms already in use in the market today ie. a smart meter and an effective retail tariff, this is unpacked more here, page 5. This is the cheapest and easiest way for consumers to derive benefit from their EV and support the network.

Adding a pattern approved meter to a device will have a non-trivial impact on the price once research, design, development, testing and certification are taken into account. EVSE manufacturers (OEMs) no doubt attempt to designate R&D costs of one product to the price of that product only, without smearing the cost across other products in their range. When multiple products are designed and developed by the same teams within an OEM, this is hard to do and will likely result in price increases across the range. If the meter were to align with international standards already in use by large multinational equipment manufacturers, this would help to keep prices lower, unfortunately such a meter does not yet exist, more on this in our recent submission to the National Metrology Institute. Higher prices for EVSE will delay the uptake of EVs, prolonging the tenure of fossil fuel vehicles and the accompanying contribution to poor health and environmental degradation.

Kerbside

The draft determination discusses the benefits of kerbside EVSE one day being exposed to cost-reflective prices and participation in network services markets. The EVC supports that the installation of kerbside EVSE with in-built metering will be voluntary and agrees that installations using currently available methods should not be prohibited. All the proposed benefits can be derived with the status quo. For example, a DNSP has agreed to assist a CPO with the rollout of kerbside EVSE chargers in an inner-city street. The installation will comprise the make up of some metal boxes ($200 each) to house a level 4 or 5 smart meter ($250), a network fuse ($50) and some final sub-circuit protection ($50). They can then initiate the truck roll and proceed around all of the agreed locations installing the boxes above where the EVSE will be installed and making the network connections. Several installations could be done in a day ($200/box) for a total of $750 per installation. Regardless of whether the meter is built into the EVSE, the DNSP employees have to proceed around the locations making the network connections for the CPO's electricians to

connect to. Status quo is neither expensive nor complicated and therefore should remain an option.

The problem we foresee is that the National Metrology Institute will likely want to make level 8 and 9 meters comply with OIML G22, in line with this consultation currently under review. The issue with this, as explained in the EVC response, is that it's still just a guide and has not reached the stage of being recommended yet;

- No other country is using OIML G22
- No test lab is ready to certify to OIML G22 – which means that not only is no EVSE manufacturer building to it today, no manufacturer can build to it today.
- OIML G22 contains 32 points at which national metering authorities are encouraged to determine what they consider appropriate. Therefore, if other countries were to adopt it, there is a good chance the Australian implementation would not align.

For these reasons, EVSE with pattern approved meters built-in will add to the cost and fewer OEMs will be willing to design such a product, reducing competition. Overall, these EVSE would be more expensive, if they were the only option, it would lead to a slower rollout and a poor service to consumers.

The EVC is happy to discuss this paper further.