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North Sydney NSW 2060
Australia

Genevieve Schulz
Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

11 April 2024

RE: Unlocking CER benefits through flexible trading – Draft Determination (ERC0346)

Dear Genevieve,

Tesla Motors Australia, Pty Ltd (Tesla) welcomes the opportunity to provide a response to the Australian Energy Market Commission (AEMC) Draft Determination on 'Unlocking CER benefits through flexible trading'.

Tesla's global mission is to accelerate the world's transition to sustainable energy. In Australia, we cannot achieve full transformation without the accelerated deployment and activated orchestration of consumer energy resources (CER). We are focused on encouraging smart, orchestrated CER, where consumers are compensated for the market benefits their systems provide. Tesla has one of the largest fleets of residential battery storage (Powerwall) in Australia and is also a leader in electric vehicle (EV) charging for both small (Wall Connector) and large (Supercharger) customers.

From Tesla's perspective, this Rule Change potentially offers significant benefits in creating market integration opportunities for CER for both small and large customers, as well as potentially unlocking further benefits through novel metering requirements. Our response below covers off on critical priorities to consider as this Rule Change, and where we see both opportunities, and potential challenges in it being implemented.

Tesla is happy to provide support to the AEMC as well as our practical project insights, throughout the final stages of the Rule Change process. Please contact Emily Gadaleta (egadaleta@tesla.com) with any questions or follow-up.

Sincerely,

Tesla Energy Policy Team

energypolicyau@tesla.com

Flexible trading with multiple service providers at large customer premises

Tesla views this draft determination as one that could particularly help to drive new innovative models for EV charging and how that is retailed, particularly for rapid deployment in commercial buildings. A major barrier to the effective install and connection of fast EV charging at many locations is that for the most suitable public charging sites (e.g., at prominent retail and commercial locations), there is a single connection point, often managed by an embedded network operator.

Tesla supports the AEMC's proposal for a secondary settlement point that will streamline the process for adopting an EV charger at a commercial location, relative to going through the embedded network process. Currently, for these 'single' sites many distribution network service providers (DNSPs) do not allow (or make it very difficult – e.g., requiring land sub-division and new title holds) to create second connection points.

Through the solutions presented in the draft determination, Tesla recognise the benefits that arise from being able to build EV charging separately. Fast chargers are (by definition) high powered (100 – 350kW+) which leads to significant increased electricity network charges being incurred, acting as a direct deterrent for any potential host of the fast-charging infrastructure when placed under a single financially responsible market participant and meter.

Under the draft determination, now where upgrades of existing assets are required, a second metering point will no longer necessitate a site-wide shut-down for day(s) to safely upgrade connection assets, removing another barrier for potential landlords of to the expected loss of trade for tenants. This is now commonly leading to advocacy by major tenants against the proposal to install fast chargers. As one potential customer noted: "Our primary concern is how the potential risk to the capacity charges that we could incur in 2023 could impact the average cost of power and in turn the profit we generate through the embedded network".

Additionally, the October 2023 update to the National Construction Code (NCC) has minimum requirements within new developments for 100% of car parks in residential and 20% of car parks in commercial buildings to be provided with EV charging infrastructure. Tesla sees this rule change in facilitating the uptake of EV charging at those premises.

As this sector continues to grow, having in-built flexibility in partitioning out EV charging load from the rest of the commercial or apartment building provides huge opportunity for emerging retail and customer models, providing greater competition in the provision of EV charging services and benefits to the consumer.

Optimising the value of CER flexibility for small customers

A key requirement in the progression of this rule change is ensuring optionality for customers is maintained. It is important to recognise the diversity of values when looking at how consumers could get more value out of their CER or be better incentivised to connect it to the power system. Consumers are diverse and there are differences in what they value, based on their motivations, ability, and opportunity

to manage their energy use and take up CER. These differences highlight the importance of maintaining customer choice throughout efforts to meaningfully accelerate deployment and orchestration of distributed assets.

From a retail and market perspective, Australia has made significant progress over the last several years (since the introduction of the market ancillary services provider (MASP)) on creating a market framework that works well for aggregated CER. While Tesla remains committed to continue developing compelling virtual power plant (VPP) market offers that incentivise customers providing access to their CER, our view is firmly that this is opt-in for individual customers. All customers should have the choice as to whether they use their purchased CER for self-consumption purposes, or, if it is used in market, they are suitably remunerated for that service. To this end, it will be important that this Rule Change does not result in any form of mandating multiple meters or secondary settlement points at consumer properties, as this adds unnecessary cost and will only benefit customers in a narrow band of circumstances.

Customer optionality over centralised control is paramount to unlock value

Tesla see's a considerable risk of this rule change is that DNSPs extend the voluntary framework to become compulsory conditions in order to connect CER to their network.

Understandably, networks are focused on maintaining network safety and reliability through the energy transition and naturally more visibility and more control offers a convenient solution. However, CER assets are consumer-owned and in order to build toward the intent of this rule change, competitive markets should continue to create the appropriate incentives for customers to participate in orchestration services, as this maintains that it is the customer who decides how and when their asset is used. The imposition of unique connection conditions across each distribution network will inhibit competition as it makes it increasingly difficult to deliver innovative products and services.

DNSPs may seek to build on this voluntary framework by establishing compulsory conditions in their connection requirements for CER. For example, a particular DNSP may introduce unique requirements that a CER asset must be installed behind a secondary settlement point, to allow centralised visibility and control. This would raise several obstacles in how value could be further unlocked for a customer's CER by potentially locking them out of revenue streams or preventing self-consumption as ways to reduce their bills.

Enabling measurement of energy flows using in-built technology

The benefits outlined in Energeia's cost benefit analysis hinge on the design of the new metering types being cheaper than the current meters that are required. Our priority is that all CER customers maintain a single meter, with a choice to either opt-in to a second meter at the point of install where they have identified a desire to work with multiple parties behind the connection point; or retrospectively add a second meter as market offers evolve. Tesla has experience with dealing with multiple meters at customer properties – all our SAVPP customers have two revenue grade meters installed, as it is a

regulatory requirement that any PPA arrangements are metered separately through a revenue grade meter. There are identifiable costs and complexities associated with this requirement, specifically:

- Installation costs are higher
- Customers (or aggregators) are required to pay two sets of meter fees annually
- There may be some additional installation complexities where the customer does not have sufficient space to install a second meter.

Tesla has not seen any regulatory barriers to retrospectively installing a second revenue grade meter at a site if a customer initially installs one meter rather than two. We assume that if this Rule Change is successful, it will drive new business models that may include alternative metering options i.e., systems with NMI pattern approved meters in built, or metering costs baked into product offer. So, it will not necessarily result in the customer incurring more costs at a future point in time.

AEMO's design should seek to align with already established international standards

Tesla will continue to support the development of innovative regulatory solutions and provide input to AEMO through their consultation on the High-Level Implementation Design workstream. We recommend that AEMO's design for both type 8 and type 9 meters look to how they can align with already established standards internationally.

Ensuring that the technical specifications embedded within procedures and guidelines deliver on expected cost savings will be fundamental to unlocking additional value for consumers through their CER assets. To satisfy two of the AEMC's assessment criteria for this rule change of 'increasing innovation and flexibility' and 'implementation cost and considerations', further detail on the specifications of the new metering under the more preferable rule is required.

We appreciate that there is a suite of procedure and guideline changes that will need to be undertaken by both AEMO and AER to ensure that the policy can be implemented in full. However, as these procedures and guidelines will specify operational and technical requirements, it is imperative to demonstrate how the changes would operate in practice to make a full assessment. Without specifications on the new metering types in type 8 and 9 it remains difficult to assess how the rule change will increase the potential for innovation in services or service types across markets.

AEMO put forward in their original rule change proposal that metering changes would reduce barriers to entry for new technologies, such as meters incorporated directly into devices. In AEMC's view, once the more preferable rule is final, the introduction and design of the new meter types will be passed onto AEMO, guided by the principles in the NER. While this process follows a sequential path to implementation, it is difficult to comment on the fundamental viability of this rule change without sufficient design details included.