



Andrew Swanson

Australian Energy Market Commission (AEMC)

4 November 2022

Dear Andrew

Re: EMO0045 – Review into consumer energy resources technical standards

Tesla Motors Australia, Pty Ltd (Tesla) welcomes the opportunity to provide the Australian Energy Market Commission (AEMC) with a response to the “Review into Consumer Energy Resources technical standards”. Tesla has engaged with the AEMC since 2020 when the Energy Security Board (ESB) first provided a rule change on the governance of distributed energy resources (DER). We were also involved in the earlier ESB consultation ahead of the proposed Rule Change. We have long been supportive of an enhanced governance framework for DER.

One of the main problems identified in the initial ESB Rule Change is that DER technical standards are currently set by seven different governance arrangements which are largely independent from each other. Since the original ESB Rule Change, this has become even more apparent as dynamic operating envelopes (DOEs) and solar remote disconnect approaches are being rolled out on a state-by-state basis in a varied and inconsistent manner.

As a result, we do not agree with the AEMC approach of “having an initial focus on existing obligations in the NER (namely AS4777.2:2020)”. Developing an enforcement framework for existing standards is important but needs to be part of a much larger piece of work. There is a real and pressing need for the AEMC to consider the roles and responsibilities of different bodies, and to make lasting recommendations on a DER standards framework that is going to be future proofed for new standards, as well as existing.

Noting that this is a Review and not a Rule Change process, the AEMC has a good opportunity to make some forward looking recommendations. Consideration cannot be given to enforcement and compliance with AS4777.2:2020 without considering the broader DER governance issues that currently exist and will increasingly exist.

We note that as part of this review, the AEMC will publish a report that:

- considers the progress made in implementing existing CER technical standards
- identifies existing activities (and their prioritisation) regarding the implementation of CER technical standards in the NER and related frameworks, including roles and responsibilities related to compliance and enforcement
- identifies, and prioritises, any new work or actions required to better realise the objectives of introducing technical standards in the NER.

While we are generally supportive of this work happening, it will be critical that the AEMC, and the final report, also consider how new standards are developed. Our [previous submission](#) to the AEMC on DER governance highlighted the importance of this point, to address the relatively uncoordinated way that new DER requirements are currently being developed.

A good example is the use of CSIP-Aus. This document was developed by an ARENA working group with no regulatory authority or legislative oversight, and the CSIP-Aus report was not consulted on in a formal manner. The CSIP-Aus documentation is only available through the knowledge sharing portal on the ARENA website. Yet, there is now a statutory requirement in South Australia for inverter OEMs to demonstrate dynamic operating envelopes, with the basis for compliance being CSIP-Aus. This highlights a clear gap in the governance in the DER standards setting process.

Tesla also has concerns with the AEMC timelines for this process. The ESB started their work on DER governance in 2019. The AEMC is proposing to follow this initial review with a final report for consultation within 12 months of this initial review. We are supportive of work being done more urgently, and recommendations progressed within the next 12 months, particularly the consideration of roles and responsibilities, and the opportunity for new agencies to be established/ existing agencies to be given extended power

As noted above, Tesla is supportive that all work done in the space considers both the development of new standards as well as compliance with existing standards. This is particularly important as the dynamic operating envelope (DOE) continues at pace. Without a review of roles and responsibilities, or setting clear requirements, these will continue to be deployed with jurisdictional variances.

To support this submission, Tesla has attached an appendix which outlines the key principles which should be considered when developing new technical DER standards. These principles will also inform our response to the Energy Security Board (ESB) Interoperability Consultation Paper, as well as the Australian Energy Regulator (AER) "Review of regulatory framework for flexible export limit implementation".

Compliance and enforcement

In respect of compliance and enforcement. Tesla reiterates our previous comments to the CEC on this topic -

The primary issue for the DER sector in respect of existing standard is the lack of an adjudicating body that can provide advice on any ambiguous aspects of an Australian Standard. There is no dedicated body that can provide industry advice or adjudication on ambiguous clauses within Australian Standards. In the absence of a dedicated body, this interpretation is left to the discretion of individual state electrical regulators, and in some instances individual inspectors. Even though Australian Standards can be applied nationally, what is deemed to be compliant differs from state to state.

Further if the DER industry is looking for guidance or wants to challenge the views of an individual inspector, there is no clear body that can support this. This issue is a natural result of the concerns around the lack of resourcing for Standards Australia that have been raised in previous consultations on DER Governance. Standards Australia is a volunteer agency, with most committee members giving up their own time to support the development of new DER

Standards. It is not reasonable to expect them to continue to provide interpretation advice. It would also not be reasonable to ask individual committee members to perform this function as they are not entirely independent.

However, it is also clear that the intent of the Standards committee will be important in establishing findings/ advice for the industry. There is a need to assign this role to an agency and ensure that the agency is involved in the setting of the standard from start to finish so they have a clear understanding of the intent behind a particular clause.

Compliance with AS4777.2

The main issue with AS4777.2 non-compliance, is that no entity currently has enforcement obligations or resourcing. If this was to be resolved, AS4777.2 non-compliance would not be an issue. This should be a key feature of the review of roles and responsibilities.

This should be coupled with improvements in installer training and customer education.

Recommendations

Within the scope of the consideration of roles and responsibilities, Tesla believes it is worth setting up a new National Technical Regulator who can play a number of different roles.

1. Establish new DER technical standards – with a focus on ensuring national consistency
2. Engage with industry, networks and AEMO on establishing these standards
3. Make recommendations to AEMC and AER on cost-benefit analysis of standards
4. Provide adjudication and interpretation on standards once developed.

Next steps

Tesla is happy to continue to support the AEMC throughout the ongoing work on CER/ DER technical standards. For more information on this submission please contact Emma Fagan (efagan@tesla.com). We look forward to continuing to work with the AEMC on this important topic.

Yours sincerely,



Emma Fagan
Head of Energy Policy and Regulation | Tesla

Appendix A – principles for new DER standards development

1. Need for national consistency for dynamic operating envelopes, interoperability and other DER standards that are developed

- Lack of consistency in standards development results in OEMs and aggregators developing jurisdictional specific platforms. This adds cost and complexity that will be passed through to consumers.
- A lack of consistency within states will create even greater issues. Aggregated DER participating in markets do so on the basis of a single registration per state. Trying to manage multiple NSP frameworks across a single market registration will be difficult, if not impossible, and will create significant disincentives for DER to be orchestrated for market purposes.

2. Product standard development needs to be used to solve clear market or network needs following a cost benefit analysis and with transparent and open consultation

- This process will ensure that all alternatives to solve market or network concerns are considered.
- It also provides transparency and a cost/benefit trade off to customers where their DER is used to solve for market or network issues.

3. There needs to be a focus on the broader compliance framework as well as product compliance

- This work should be broad and consider:
 - i. Installer and product retailer training and expectations.
 - ii. Registration requirements for aggregators and any third parties with direct relationships with customers to increase accountability and provide AEMO with more visibility on participating entities.
 - iii. Governance frameworks for NSPs considering how interoperability and solar curtailment requirements are being used.

4. Interoperability cannot be explored without concurrent work on customer protection frameworks

- There are a number of customer protections that need to be considered in respect of interoperability that have not yet been developed.
- With a focus on enhanced orchestration of customer owned assets, customers need to be provided with choice, and suitably protected.

5. Network developments such as DOEs must be compatible with DER market integration and VPP development

- It will be critical that dynamic export agreements are developed in a way that does not impact on the ability of DER to participate in markets. This includes consideration of:
 - i. Prioritisation of services and exemptions for grid/ critical market services.
 - ii. Management of non-compliance risks where assets are controlled by a party who is not the registered market participant.