



Energy Security Board

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28 July 2020

Dear Energy Security Board

Re: Energy Security Board (ESB) – Governance of DER Technical Standards Consultation Paper

Tesla Motors Australia, Pty Ltd (Tesla) welcomes the opportunity to provide feedback to the Energy Security Board (ESB) on the “Governance of DER Technical Standards – Consultation Paper”.

Tesla supports an increased focus on governance of DER in Australia. This is an important recognition of the role that DER plays in the current energy mix and will increasingly play over the next decade. It also recognises a major gap that currently exists, as ownership of DER is spread across multiple regulatory and industry bodies at a state and federal level.

We believe that a coordinated and long-term approach to product safety, installation, technical performance and market integration of these assets is absolutely critical. As such we fully support the suggested approach to establishing a DER Standards Governance Committee under the National Electricity Rules (NER).

Our priorities in respect of DER governance are:

- Creating the best customer experience – reducing green tape, minimising risks to consumers (in respect of safety and any reduction in system efficacy), and ensuring consumers are compensated for their contribution to the market.
- Clear industry roadmap – timelines, industry participation etc.
- Appropriate compliance timeframes – ensuring that the DER Standards plan is released with sufficient consultation periods, and allows for appropriate compliance timeframes.
- Coordination with associated DER market reform work – critical that the work done on technical standards is properly coordinated with associated work done integrating DER into the markets. This will be particularly important to ensure that potential future markets are not sacrificed with the establishment of technical standards.

Taking these priorities into account, it is important that the remit of the DER Governance Committee goes further than developing **new** standards. It must also focus on addressing the current governance issues and recommend critical reforms for the way all relevant regulatory bodies work in this space. Tesla believes that there are three key areas that need to be addressed:

1. Addressing key underlying issues in the DER Standards Setting process that currently exist, and will not necessarily be resolved by a coordinating body
2. Establishing clear roles and responsibilities for all DER regulatory bodies, and
3. Establishing the DER Standards Governance Committee to manage a streamlined future process.

These three processes may be considered as a slightly expanded Option 3 presented in the ESB consultation paper, however we believe that doing these three things are critical to making the establishment of a new DER Standards Governance Committee a success. There is work that can be

done in each of these three areas without requiring wholesale legislative change. So it would be less work than Option 4, and there are a number of work programs that can be run in parallel.

Current issues for DER standards and governance across Australia

As a general principle, Tesla supports reform of the way DER is governed across Australia. This includes creating a governance structure for setting new standards. The proposed DER Standards Governance Committee will, however, be guided and reliant on the work of relevant existing bodies contributing to DER requirements across the country. The Cutler Merz/ Sapere review for the ESB identified seven different governance arrangements and a number of areas of improvement within those governance arrangements.

Tesla's view of the relevant bodies that are involved in the development and setting of standards, and ongoing compliance is set out below:

- **Technical performance:** set by a combination of DNSPs, AEMO, Standards Australia and increasingly state governments
- **DER product safety:** no real ownership. Combination of industry led work (BESS Battery Safety Best Practice Guide) and Clean Energy Council (CEC) listing requirements enforceable only through state subsidy schemes.
- **Installation requirements:** managed through Standards Australia (i.e. AS3000 and AS5139) and state electrical safety regulators.
- **Interoperability and market integration requirements:** work underway by AEMO and state governments as part of the state subsidy schemes. No compliance mechanisms in place yet

Tesla supports work in each of these areas being done by agencies that best able to identify and manage risks, provided that there is adequate industry involvement throughout the process. However in the absence of a dedicated governance framework there are major flaws in each of the areas above, across the seven governance arrangements outlined by Cutler Merz/ Sapere. The ESB Consultation Paper notes the following issues:

- An overall lack of leadership and coordination and clear objective as to how DER technical standards should be governed.
- Weaknesses in the Standards Australia technical standards process in terms of speed, participation and decision making not being explicitly aligned with National Electricity Objective (NEO).
- Lack of harmonisation in network connection standards across DNSPs.
- Under-resourcing of compliance and enforcement activities, and gaps especially for non-safety related standards.

Tesla would add the following key issues to this list:

- Lack of engagement with the “new energy” sector. The majority of work and engagement is managed by incumbents. Companies offering new energy technology solutions are often left out of the fold because they're more thinly resourced and don't necessarily have the resources (financial or human) to spend large amounts of time engaging in multiple committees across multiple agencies, and responding to countless consultation processes.
- Lack of transparency. A number of processes undertaken above are non-transparent in their approach. For instance, Standards Australia committees are commercial-in-confidence so no discussions on the comments received or findings are made visible to industry. As a determining body, this lack of transparency is a critical issue. Similarly NSPs are under no regulatory obligation to provide updated connection standards to industry for comment. As a result there is a wide variance between NSPs as to the level of consultation that is taken, if any.
- Lack of coordination with market reforms – a lot of the technical standards discussions appear to be happening in parallel to DER market development and integration. It is difficult to see how these two processes are complementary – i.e. if new voltage response requirements are progressed will this negate the need for future dynamic voltage response markets? How do the

freq-watt requirements introduced via technical standards interact with VPPs providing frequency control ancillary services support (FCAS) etc.

Reform of current processes

As noted above, Tesla supports the approach of establishing a DER Governance Committee, however this Committee will ultimately still be reliant on the work done by all agencies involved in the DER regulatory space. The approach proposed by the ESB will manage concerns in respect of how future standards are set and lead to an effective future model.

However it will also be critical for the existing flaws identified above to be resolved. Without addressing the underlying issues then the DER Standards Governance Committee is likely to continue to encounter these same concerns.

A first order priority for DER governance should be addressing these existing concerns. This might become the first order of business to be completed by the DER Standards Governance Committee or to occur before the DER Standards Governance Committee is formed.

Establishing clear roles and responsibilities

Related to the first point above, it will also be critical that all regulatory bodies involved in the DER Standards Setting Process in an ongoing manner have clear roles and responsibilities and there is a clear process in place. This should consider:

- Who can suggest new Standards
- Conflicting laws/ legislative and regulatory requirements,
- Who has review authority
- Who is responsible for managing industry or consumer complaints, questions or disputes
- Compliance requirements of each body

Having these clear roles and responsibilities determined up front will allow agencies to set appropriate budgets, allocate suitable resources, and it sets expectations for industry as to who will be doing what and allows for appropriate preparation.

Proposed DER Standards Governance Committee

Tesla supports the establishment of this Committee. The consultation paper notes that the Committee would be responsible for:

1. setting a vision for DER technical standards;
2. developing a technical standards work program;
3. monitoring, reviewing and setting DER technical standards;
4. considering issues related to compliance and enforcement of standards in their development; and
5. providing advice on standards and undertaking related reviews.

Our views and governance priorities under each of these areas is outlined below.

1. Setting a vision for DER technical standards

Tesla supports this position, and the focus on consumers as outlined in the Consultation Paper. We also believe that full coverage of DER requirements product safety and installation under this program. Ultimately compliance will rest with the relevant state electrical regulators – but electrical system security and distribution network management also requires focus on product safety.

Safety is also critical for consumers as well and a clear gap with no body taking ownership of the Battery Storage Best Practice Guide on Product Safety (as an example). Other industries are likely to face similar gaps in ownership on product and installation standards as the industries evolve.

As per the point above, allocating clear roles and responsibilities will be critical in setting the vision for DER standards. The vision should cover not just the standards themselves, but how they are to be developed.

Tesla supports the approach of establishing technical expert sub-committees although we do not agree that using existing Standards Australia committees is a good approach. There's a need to refresh and review to make sure the right people are consulted on specific standards.

It will also be critical for the vision to consider the assessment of technical standards vs. market incentives for particular behaviours (through DER integration into real-time markets or through tariff restructuring). Often the two are related and in some instances technical standards will be used to enable market integration (i.e. interoperability and communications standards). However there is a risk that DER will be forced to provide certain services that would otherwise be remunerated under market structures. The vision for DER technical standards cannot be designed in a bubble, it needs to consider all other DER work programs underway.

Tesla also supports the focus on how stakeholders will be engaged. It will be important for the DER Standards Governance Committee to consider how all stakeholders are best engaged, not just the major market players. We would suggest that industry working groups will be a way to bring industry players on board early on, and will be preferable to desktop consultation

2. Developing a technical standards work program

In developing a technical standards work program, the committee will need to ensure that all suggested standards are introduced to solve a particular problem or contribute to the growth of the industry. Over the last 24 months, the industry has seen an enormous amount of activity led by a multitude of bodies (state governments, industry bodies, regulatory bodies etc.) It is not always clear what problems are to be addressed by the proposed standards and how they are being coordinated with other activities.

As per the comments on point 1 above, all new standards should be considered against incentive based alternatives.

In setting the work program, Tesla also recommends that the following is taken into account:

- Clear timelines for consultation, approach for consultation and establishment of industry working groups to support new standard development.
- Timelines for implementation – with appropriate compliance timeframes

3. Monitoring, reviewing and setting DER technical standards

When setting new DER technical standards, Tesla recommends focusing attention on international standards and not recreating the wheel in Australia.

Further consideration should be given to appropriately resourcing bodies that are developing the standards. It will also be important to address the flaws in the existing processes raised above.

There are other critical questions that need to be answered in respect of how the Committee sets standards:

- Who is able to suggest new Standards to the Committee? Can anyone make recommendations for the Committee to consider (similar to the current rule setting process overseen by the AEMC).

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- Will the Committee be the only body who has the opportunity to guide DER standards written by Standards Australia? Or is there the potential that Standards Australia will continue to publish DER standards outside of the approved work program? If so will the Committee have the authority to advise state governments that Standards developed outside of the “technical standards work program” should not be called upon in state legislation?
 - What authority will the Committee have over DNSP processes?

4. *Issues related to compliance and enforcement of standards*

This is a very important issue as there is a clear gap at the moment, with very little focus on compliance. Tesla supports this being a part of the DER Governance Committee priorities.

It will be equally important for the DER Standards Governance Committee to consider how complaints are lodged, both by industry and consumers. While the Committee may not have adjudicative functions, it should consider the bodies that are best able to clarify any ambiguities in the Standards and respond to industry questions and concerns.

5. *Providing advice on standards and undertaking regulatory reviews*

The approach proposed by the ESB in providing advice on standards and undertaking reviews appears reasonable, subject to all the comments above.

For more information on any of the information contained in this response, please contact Emma Fagan (efagan@tesla.com).

Kind regards



Emma Fagan

Head of Energy Policy and Regulation

Answers to specific consultation questions:

1. Do you support the proposal to establish a DER Standards Governance Committee under the National Electricity Rules? If not, what alternative would you suggest?

Tesla supports the proposal to establish a DER Standards Governance Committee. As noted in the body of our submission above, there is a clear need for reform of this area at the moment.

2. Do you support the DER Standards Governance Committee being advisory or be determining? Please provide reasons.

Tesla supports the body being determining. If it does not have determining power then there is a risk of delay or overlapping processes. I.e. if the committee is advisory only and it is expected that their advice is provided to the relevant regulatory bodies, and those bodies subsequently go through their own processes, this will create inefficiencies.

3. Do you have any feedback on the proposed functions of the DER Standards Governance Committee?

As per comments in the body of the response above.

4. Do you have any feedback about the Committee determining standards in a subsidiary instrument under the rules?

Whichever instrument is used, it is critical that there is appropriate transparency and appropriate periods for industry to be consulted.

5. Do you have any feedback on the development of new compliance and enforcement arrangements for DER technical standards?

As per comments in the body of the response above.

6. Do you support the proposed composition of the membership and nature of chair of the Committee? Please provide reasons or nominate alternative arrangements.

The Committee composition does appear to be skewed to the regulatory bodies with only 2 out of 11 members likely able to accurately represent the DER technology experience (one market aggregator and one DER OEM). We would also make the following comments:

- The “Market Aggregator” should not be limited to registered participants. There is no classification for VPP operators and many VPPs operating under the AEMO trial are doing so through the customer retailer. Third party VPP aggregators registered with AEMO through this process are not “registered participants” and so would be excluded from committee membership. This is clearly not the intended outcome as these non-registered VPP operators would have far more relevant experience for the committee.
- It is difficult to see how one DER OEM can represent the full suite of OEM views when it potentially captures everything from residential solar and storage, through electric vehicles and controllable loads like air-conditioners. The experience of each of these DER technologies will be very different.

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- The consumer expert should be an expert in DER specific consumer issues. The broader customer experience in respect of the electricity sector is already well protected through existing forums.

7. Do you support the proposed terms and selection arrangements? Please provide reasons?

Tesla supports the proposed terms and selection arrangements proposed.

8. Do you have any feedback on the other elements of the proposed operation of the Committee?

Our feedback on the other elements of the proposed operation is included in the body of our response above.