7 October 2021

Andrew Swanson
Senior Adviser
Australian Energy Market Commission

Submitted online

Dear Mr Swanson,

RE: Governance of DER Technical Standards Consultation Paper

Energy Networks Australia (ENA) welcomes the opportunity to make this submission in response to the Australian Energy Market Commission's (AEMC) Consultation Paper on the Governance of Distributed Energy Resources (DER) Technical Standards.

ENA is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

We and our members are broadly supportive of efforts to improve DER technical standards in the National Electricity Market (NEM) and believe it is a critical part of ensuring the positive energy future of all customers.

Key messages

- We note that one of the major drivers of the Governance of DER Technical Standards work by both the Energy Security Board (ESB) and the AEMC was the urgent need to revise the Australian Standard AS4777.2 – Grid connection of energy systems via inverters, to take account of the need for "smart" inverters and power quality settings. The revised inverter standard was adopted in December 2020 and will be in force in December 2021, suggesting, that while there is still work to do on standards for DER, there is a less pressing need to radically change the approach to standards governance.
- The major issue to be addressed is timely, strategic and regularly updated assessments of the need for revision of key standards that would be best managed through developing a forward plan for addressing technical standards and a body to oversee the assessment and delivery of the required standards.
- Revising or creating standards takes time to ensure that all stakeholders, including manufacturers, are properly consulted and that the standard can be readily adopted. The revision of AS4777.2 took approximately 18 months. A rule change proposal can take up to 12-18 months. Governance of DER standards under the NER may not expedite the standards revision process.
- If there is still a need for a new standards governance process for DER, we strongly support the formation of a separate advisory committee, similar to the Reliability Panel, with diverse representation and clearly defined terms of reference.

- We strongly support leveraging abilities where they currently exist. That is, the AEMC convening a committee like the Reliability Panel to provide advice on the forward plan and Standards Australia as the industry standards development body.
- The industry would benefit from clarification on how this rule will interact with other industry efforts such as the ESB's Maturity Plan, DER Implementation Plan and the Data Strategy.
- The AEMC paper refers to the compliance and enforcement of standards by DNSPs. This is a complex issue and ENA would be very keen to work with relevant parties, such as the Clean Energy Regulator, the Clean Energy Council, AEMO, AER and the AEMC to develop the processes needed to determine and address compliance in the nearly 3 million and growing rooftop solar PV installations across Australia.

A forward plan is more important than speed

We agree that the current technical standards development process is slow, but the real issue that should be addressed is the need for a forward plan for developing standards within the timeframes that the industry requires, not the revision or creation of the process itself.

The formation of a new standards development process will not guarantee faster results and in fact may have the adverse consequence of taking longer to produce lower quality results.

Currently, the standards development process is driven by industry based on perceived and imminent need and addressed on an ad-hoc basis. The industry suffers from a lack of strategic forward planning and this results in a perception that the standards revision processes is slow and not fit for purpose.

However, where a standard impacts manufacturer processes, time for appropriate consultation and time to incorporate changes to standards is needed to support product design and release.

A body aimed at developing and driving a forward plan with a clearly defined timeline of what is required and by when will drive timely creation, adoption or revision of standards and provide greater certainty to the industry in a rapidly changing environment.

Representation and scope of committee

ENA strongly supports the formation of an advisory committee on DER technical standards with diverse representation from the energy industry, and chaired by the AEMC, analogous to the approach taken with the Reliability Panel.

We have a strong interest in establishing a robust governance framework for this committee. The committee should be similar in structure to the Reliability Panel with the addition of customer representatives and Original Equipment Manufacturers (OEMs).

Extending the remit of the existing Reliability Panel to include DER technical standards is unlikely to be appropriate for a variety of reasons, such as their focus on wider system security, infrequent meetings and a Panel specifically selected to address reliability issues rather than DER technical issues.

ENA believe a tightly focussed scope for a new advisory committee would largely avoid significant implementation costs that ultimately flow through to consumers. We suggest the following scope for the committee, for your consideration:

- The committee should examine jurisdictional and national legislation and consider how it impacts adoption of national DER technical standards.
- The focus of the committee should be tightly focussed on the standards needed to integrate DER products and appliances.
- There should be a limited capacity to extend the remit of the committee to address new or emergent issues.
- The committee should have an obligated requirement to consult with stakeholders and consider their views.

Leveraging existing abilities and processes

ENA strongly supports leveraging abilities and processes where they currently exist. We do not believe that developing new standards development capabilities within organisations with a very different remit is warranted or efficient.

By utilising the existing skills of both the AEMC and Standards Australia to deliver standards revision planning coordination and standards revision, respectively, costs to customers are likely to be minimised and industry uncertainty reduced, since the revision process and governance at Standards Australia is well understood.

Additionally, Standards Australia is recognised and trusted by industry because, while the standards revision or development process is perceived by some to be slow, it ensures high quality, technologically agnostic solutions that provide market certainty to a multitude of stakeholders such as OEMs, Networks, Retailers, Installers and Customers.

Interaction with other ESB reforms

There is wider uncertainly in how this rule change will interact with the ESB's Maturity Plan, DER Implementation Plan and the Data Strategy. It is important that all reforms are holistically considered to avoid overlap and duplication of effort resulting in higher costs, industry uncertainty and missed opportunities.

The ESB's Maturity Plan Pilot, exploring approaches to addressing minimum demand, was an example of co-design that did not deliver outcomes that were endorsed by either industry or customers. The Maturity Plan, as did the earlier DER Integration "sprints", required a great deal of time and effort from industry and customers. Further, following the publication of the Post-2025 recommendations, the governance and leadership of the Maturity Plan is poorly defined, with a great deal of uncertainty around how topics for review will be selected and how the outputs will inform or influence Market Bodies on DER Integration. There is a risk that the DER technical standards process could follow the same model as the Maturity Plan if the ESB's suggested solution was progressed. This would likely result in significantly adverse outcomes for industry and the successful deployment of DER.

Standards development should be the responsibility of an agency with experience in standards, such as Standards Australia, while the work of setting the forward plan of standards would benefit from oversight from the AEMC. This is especially the case, given the AEMC's role with the ESB and their close relationship with the other market bodies, ensuring that the AEMC is best placed to guarantee that duplication is minimised and gaps are avoided when delivering fit for purpose standards.

Whilst the ESB's DER Implementation Plan could act as a useful reference of topics for a standards advisory committee to address, it will be up to this body to set a more detailed plan of dates and outcomes for each issue, which is not clearly addressed in the DER Implementation Plan.

ENA feels confident in the AEMC's ability to coordinate and drive this initiative within a robust governance framework that is richly informed by, and clearly articulated to industry.

Compliance and Enforcement

The AEMC paper references the compliance and enforcement of DER technical standards by DNSPs, but the paper does not elaborate on the significant underlying issue of compliance of DER appliances once they are installed.

It is not cost- or time-efficient for DNSPs to inspect every inverter installation and for most of the existing fleet DNSPs rely on the customer (and their installer) certifying that they have complied with their contractual requirements. Unfortunately, increasingly it is clear that many installations are not compliant and customers and their installers are either negligently or falsely certifying they have complied as was found in the CERs Integrity Review of the Rooftop Solar PV Sector[1].

ENA recognises that inverter compliance is a critical issue for AEMO and for the DNSPs and would welcome the opportunity to explore with relevant parties, such as the Clean Energy Regulator, the Clean Energy Council, AEMO, AER, the relevant bodies and departments in each jurisdiction and the AEMC the best approach to ensuring compliance with the required standards. Collaboration and cooperation, particularly when inverter settings need to be changed remotely by the OEMs, will be necessary to deliver a cost-effective and time efficient solution to ensuring compliance.

Setting and exploring effective compliance measures could be an important consideration for the new advisory committee.

If you have any questions or would like to discuss specific topics further, please do not hesitate to contact Dor Son Tan, Head of Distribution dstan@energynetworks.com.au.

Yours sincerely,

Jill Cainey
General Manager Networks

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1 http://www.cleanenergyregulator.gov.au/DocumentAssets/Documents/Integrity%20Review%20of%20the%20Rooftop%20Solar%20PV%20Sector.pdf