

7 October 2021

Ms Anna Collyer
Chair
Australian Energy Market Commission
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Reference code: ERC0319

Dear Ms Collyer,

Response to governance of DER technical standards consultation paper

AusNet is pleased to have the opportunity to make a submission to the Australian Energy Market Commission's (**AEMC**) rule change consultation paper on the governance of Distributed Energy Resources (**DER**) technical standards.

DER technical standards are currently implemented as a requirement in the Rules for inverters connecting to distribution network service providers (**DNSPs**) to comply with the Australian Standard AS/NZS 4777 as a condition of the customer's new or updated connection agreement. This Australian Standard was developed in consultation with manufacturers, DNSPs and relevant stakeholders such as the Clean Energy Council.

Changes were proposed by Dr Kerry Schott AO to introduce new governance arrangements for DER technical standards. The objective is to provide consistent technical standards for DER across the National Electricity Market (**NEM**) with a fast and transparent process in support of the rapid rise in increasing two-way power transfers.

AusNet is supportive of efforts to improve DER technical standards. Implementing more functionality, communications and interoperability to inverters installed at customer premises is an important part of ensuring the positive energy future of all customers.

A separate panel similar to the Reliability Panel recommended

We support the formation of a separate advisory committee with a diverse representation, including aggregators. The electricity industry, manufacturers and stakeholders demonstrated strong capabilities in working together in developing AS/NZS 4777.2:2020, we suggest the governance of DER technical standards leverage these capabilities.

As identified in the Consultation Paper, expanding the Reliability Panel's scope is an alternative option. The Reliability Panel has been invaluable in maintaining up to date system standards but has skillsets focused on transmission level generation which is substantially different to distribution connected low voltage inverters. Therefore, rather than expanding the scope of the Reliability Panel we suggest it would be better to establish a new panel with the same governance arrangements as the Reliability Panel. This would set the framework for periodic reviews of the DER technical standards.

It is important the scope of new panel for DER technical standards governance is tightly defined. Therefore, we suggest the scope of the Rule change should be limited to inverters, electric vehicle (EV) charges and interoperability with inverters. Requirements that extend beyond the customer's inverters may result in significant implementation costs to customers and may not be enforceable through the customer's connection agreements with their DNSP.

Implementation conformance of DER technical standards must be considered

The consultation paper and the Rule change request refer to the AER having enforcement capabilities for compliance (or conformance) to the DER technical standards. However, under the current Rules it is the DNSP that has the role of agreeing with the customer or their agent to install a conforming inverter energy system. The DNSP often has no other choice but to assume the customer (and their installer) will act in good faith that the installation is consistent with the connection agreement.

DNSPs cannot be expected to ensure that all inverter energy systems are conforming to the current DER technical standards. If the customer does not install a compliant inverter energy system as agreed, or does not request an alteration their connection agreement, the DNSP would have to identify the non-conformance and liaise with the customer to remediate the issue. Non-conformances can even result from inadvertent changes that the customer is not aware of, such as a manufacturer remotely updating the firmware on installed inverters different inverter settings that are non-conforming to the connection agreement and DER technical standards. Additionally, a change in DER technical standards cannot be applied to inverters already installed without the customer accepting an updated connection agreement from the DNSP.

DNSPs are currently not funded to undertake these necessary measures to ensure conformance to DER technical standards across the board. Non-conformance is only identified on risk management basis and requires extensive smart meter data analysis. For most installed inverters, this responsibility needs to be placed on parties best placed to mitigate these issues (such as installers and original equipment manufacturers). Such cooperation has occurred in the past where the Clean Energy Regulator or the Victorian Government has required some evidence of conformance with AS/NZS 4777 as a condition of paying rebates and subsidies. Going forward, cooperation between installers, original equipment manufacturers, energy retailers and DNSPs will continue to be essential in maintaining systems are installed conforming with DER technical standards.

We recommend, therefore, that when establishing new obligations in the Rules (or a subordinate instrument) for new and altered inverter energy systems to conform with DER technical standards that those obligations extend to ensure energy retailers and installers provide incentives for customers to comply with their DNSP's connection offers.

If you have any queries on our submission or wish to meet with us to discuss our experience in managing conformance with DER technical standards with our customers, please do not hesitate to contact Justin Betlehem on 03 9695 6288.

Yours sincerely,

A handwritten signature in black ink that reads "C. Eddy". The signature is written in a cursive style with a long horizontal stroke extending to the right.

Charlotte Eddy
Manager Economic Regulation