



14 January 2021

Anna Collyer
Chair
Australian Energy Market Commission
GPO Box 2603
SYDNEY NSW 2000

Dear Anna

Re: ERC0301: Technical standards for distributed energy resources

CitiPower, Powercor and United Energy welcome the opportunity to respond to the Australian Energy Market Commission's (AEMC) draft rule determination on technical standards for distributed energy resources (DER).

We agree that technical standards for DER are essential in developing and managing the growing number of micro-embedded generators connecting across the National Electricity Market (NEM). We have reviewed the draft rule determination and while we are in broad support, we have provided feedback below including highlighting areas where further clarification would be preferable prior to the final rule determination.

1. Compliance arrangements

The draft rule determination places an obligation on distribution network service providers (DNSPs) to be satisfied that the connecting inverter meets the DER technical standard. As a result, manufacturer and installers are obliged to show the DNSP that those requirements are met. It should be noted that under the proposal, all inverters are expected to undergo testing, using the stipulated methodology, to demonstrate appropriate capabilities and receive testing certificates of approval that the device is deemed to meet the standards.

We strongly support the existing compliance and monitoring systems under the Clean Energy Council and the Clean Energy Regulator, relating to the certification of products and installers of electricity generating systems, be used to confirm the compliance of each inverter to the proposed standard. Each of our businesses currently reference the approved inverter list when approving connections to our network (i.e. only accredited inverters are installed).

2. Timing of AS4777.2.2020 and the Minimum Technical Standard should be aligned

We agree that in the final rule determination, the DER technical standards should refer to the updated standards AS 4777.2.2020. We recommend both the AS 4777.2020.2 and the DER technical standards come into effect at the same time, taking into account the grace period planned for the AS 4777.2020.2 update of 12 months. This will help ensure manufacturers have enough time to comply with the requirements of AS.4777.2.2020.

If the DER technical standards came into effect prior to the grace period ending for the AS 4777.2.2020, it is most likely DNSPs will get some connection applications with inverters compliant under AS 4777.2.2015. In such cases, DNSPs would consider not installing those inverters on the network. Alternatively, temporary arrangements could be adopted such as amending the ride-through settings (e.g. passive anti-islanding voltage limits) at the time of installation and submitting documentation for review and approval to ensure DNSPs are satisfied that the inverters meets the DER technical standard. This would result in higher transactions costs to review, validate and approve documents provided by installers and relies on installers being trained to enable the settings correctly. We do not recommend this approach as we have seen high levels of non-compliance on a similar program that relies on installers, enabling PQ response mode (Volt/Var & Volt/Watt) where approximately 60% of new installations were found not to have the PQ response mode.

3. System size

The draft rule determination creates the DER technical standards which embedded generating units connecting by way of a micro EG connection service must comply with. The DER technical standards refer to the National Electricity Rules (NER) Chapter 5A.1 which refers to AS4777.1 which then states it is applicable to systems less than 200kVA. For clarity, the DER technical standards in the final rule determination should stipulate the size limit.

4. Applications of rule change under warranty

The draft rule determination stipulates that the DER technical standards will apply to new connections and replacement and alternations (including upgrade, extension, expansion and augmentation). Suppliers are likely to provide replacements under warranty which may be compliant under the previous standards. If this is not allowed, the final rule draft determination should make this clear.

Should you have any queries, please contact Ellen Lukin on 0428 824 858 or elukin@powercor.com.au.

Yours sincerely,



Brent Cleeve
Head of Regulation
CitiPower, Powercor and United Energy