27 July 2020

David Swift  
Independent Deputy Chair  
Energy Security Board

Dear Mr Swift,

### CER Submission on Governance of Distributed Energy Resources (DER) Technical Standards

The Clean Energy Regulator (CER) welcomes the opportunity to comment on the Energy Security Board’s *Governance of DER Technical Standards Consultation Paper*. The Clean Energy Regulator is an economic regulator that administers most of Australia’s climate change laws, including the Renewable Energy Target and the Small-scale Renewable Energy Scheme (SRES).

The CER supports development of co-ordinated DER technical standards that meet electrical system security requirements, support distribution network management and provide long-term affordability and choice for consumers. We agree that the pace of change for setting DER standards has been too slow given the rapid deployment of rooftop PV systems and welcome the proposal to dedicate resources to this area.

We take this opportunity to clarify the role of the Clean Energy Regulator with respect to DER, specifically small-scale solar:

* We process Small-scale Technology Certificate (STC) entitlements under the SRES which is a voluntary scheme. One eligibility requirement for certificates is obtaining a state/territory certificate of electrical safety, which involves complying with Australian Standards. However, the Clean Energy Regulator does not have powers to enforce electrical safety, or Australian or other Standards, for specific PV systems – only to decide whether to validate certificates where we receive a statement that all eligibility requirements are met.
  + A PV system must comply with state and territory electrical safety laws regardless of whether it participates in the SRES. These ensure a minimum level of safety.
* Other eligibility criteria are that the solar panels and inverters are of a make and model approved by the Clean Energy Council (CEC) as meeting Australian Standards. These are assessed using Solar Panel Validation (SPV) for panels; and automated checks by the Renewable Energy Certificate Register against CEC approved make and model lists for inverters.
* By law the Clean Energy Regulator is required to inspect a ‘statistically significant’ number of small-scale PV systems installed each year where STCs have been created for conformance with relevant standards.
  + This is approximately 1% of 350,000 annual installations.
  + This program complements, but does not replace, the electrical safety laws and inspection and compliance programs administered by relevant regulators in each state and territory.
  + The results of these inspections are provided to the Clean Energy Council and relevant State and Territory regulators. In the event of non-compliance the responsibility lies with those bodies to take enforcement action.

Outside of the SRES inspection program, the Clean Energy Regulator is not responsible for the ongoing “monitoring of systems” as described in your paper. We have, however, recently published a report ‘[*Analysis of Small-scale Renewable Energy Scheme Inspection Data to Assess Photovoltaic System Residual Systemic Electrical Safety Risks*](http://www.cleanenergyregulator.gov.au/RET/Pages/News%20and%20updates/NewsItem.aspx?ListId=19b4efbb-6f5d-4637-94c4-121c1f96fcfe&ItemId=796)’. In that report we found that with the exception of water ingress into a small proportion of rooftop DC isolators there was a very high level of electrical safety compliance.

If the ESB considers compliance with the proposed coordinated technical standards should become a requirement of SRES eligibility, then a Regulation amendment will be needed. The Department of Industry, Science, Energy and Resources has policy responsibility for the SRES. However, as with the SRES eligibility requirements for a certificate of electrical safety, there would need to be a regulatory entity certifying compliance that we could rely on when deciding whether or not to issue certificates.

The SRES incentive is gradually phasing out, ends in 2030 and may not get 100% capture well before that date as the level of incentive continues to decline each year. Hence, the ESB may wish to consider the most suitable long term compliance arrangements for the Technical Standards.

We understand one important area of DER technical focus for AEMO relates to inverters. Once AEMO has its technical standards in this area settled, we would be available to assist the ESB and AEMO in meeting with the CEC and inverter manufacturers with a view to finding the fastest path to ensuring new inverters have the required functionality and preferred default settings.

Our best contact on this is Matt Power, his contact details are [matthew.power@cer.gov.au](mailto:matthew.power@cer.gov.au) or call on 02 6159 3972.

Yours sincerely

Mark Williamson

Executive General Manager

Clean Energy Regulator

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