



AEMC to take action on technical standards for distributed energy resources

The AEMC's final determination on the governance of distributed energy resources technical standards sets out a plan for the next phase of its work to enable consumers to fully realise the benefits of systems such as rooftop solar.

Final rule determination

The AEMC's forward work plan on DER technical standards draws on the five distinct roles that it considers are essential to support the full realisation of DER's potential benefits for consumers.

A key component of the work plan set out in the final rule determination is to carry out a review into the need for new DER technical standards as well as assessing the progress to date of implementing current requirements. The review will consider the ability of DER devices to deliver benefits to consumers as well as the NEM.

A draft terms of reference for the review to carry out roles one and five (see below) has been published with the final rule determination. The AEMC welcomes stakeholder views on the proposed scope.

The five roles on DER technical standards described in the final rule determination are:

- **Role one:** identify when new DER technical standards are needed. The AEMC will begin consulting with stakeholders upon the completion of this rule change process on its proposed terms of reference for considering the NEM's priorities from DER technical standards. The proposed scope of this work includes considering consumer interests and needs, interactions between the NER and other instruments, and clarifying existing roles and responsibilities for developing technical standards.
- **Role two:** actively work with the Energy Security Board (ESB) and the Australian Renewable Energy Agency (ARENA)'s Distributed Energy Integration Program (DEIP) to support existing work on DER technical standards. The AEMC will continue working with the ESB's DER implementation plan and ARENA's DEIP workstreams on interoperability and dynamic operating envelopes. This work will complement existing initiatives to identify the NEM's interests from new and updated DER technical standards.
- **Role three:** observe Standards Australia's DER committees to contribute to the established work program. The AEMC will expand its non-voting participation role in Standards Australia's DER-related committees such as those on electrical metering equipment, minimum inverter standards, and smart energy.
- **Role four:** update DER technical standards in the National Electricity Rules (NER). The AEMC will consider any rule change requests to add, update or amend technical standards in the NER, as required.
- **Role five:** report on progress adopting technical standards in the NER. In conjunction with the work planned under role one, the AEMC will also assess the NEM's progress adopting standards already introduced in the NER (such as minimum inverter standards). The proposed scope of issues under this role include compliance and enforcement, interpreting existing standards, and interactions between the NER and other regulatory regimes.

The AEMC's final rule determination, consistent with its draft rule determination, is that using existing powers enables it to promptly commence its next stage of work on DER technical standards in a way that complements work already underway across other organisations. This approach aims to provide effective, targeted support for the development of DER technical standards where needed to enable consumers and the NEM to gain from DER's potential benefits.

Specifically, the forward work program relies on the AEMC's ability to self-initiate a review and to establish committees, panels, and working groups of external experts as required.

These powers allow the AEMC to consider how existing rules are achieving energy market objectives and the extent to which reforms may be needed. The provisions provide the AEMC with some flexibility, including the ability to commission reports, publish discussion papers or draft reports. The AEMC can also convene working groups consisting of external experts relevant to the issues under consideration.

The final rule determination is therefore not to make a rule.

Context

As Australians continue to buy and install DER at record rates — including rooftop solar PV, battery storage systems, and electric vehicles — the technical standards for how these devices perform in various circumstances is becoming increasingly relevant to the security, reliability, and affordability of power supply in the NEM. Importantly, DER technical performance also impacts on the benefits consumers derive from DER devices.

Technical standards refer to established requirements for DER products and involve common and repeatable rules, guidelines or characteristics. For example, minimum inverter standards reduce the likelihood of solar PV systems automatically disconnecting from the power grid by improving the ability of these devices to continue exporting power during minor voltage fluctuations on distribution networks.

Rule change request

In September 2020 Dr Kerry Schott AO, as Chair of the ESB at that time, submitted a rule change request seeking to introduce new governance arrangements for DER technical standards in the NEM. The intent of the request was to address the perceived need:

- to implement consistent technical standards across the NEM
- for a fast, flexible and transparent standards setting process.

Specifically, the rule change request proposed creating a standing committee under the National Electricity Rules (NER) to assess and, if needed make, DER technical standards for the NEM. Reporting to the AEMC, the committee would consist of a mixture of DER industry, consumer and market body representatives. It was suggested that the proposed committee's functions could include determining new DER technical standards and otherwise providing advice to the AEMC on related issues.

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