



Government
of South Australia

Department for
Energy and Mining

Our Ref: D20024009

Ms Merryn York
Acting Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235
merryn.york@aemc.gov.au

Dear Ms York

RE: CONSULTATION PAPER: TECHNICAL STANDARDS FOR DISTRIBUTED ENERGY RESOURCES

The Energy and Technical Regulation division of the Department for Energy and Mining (DEM) thank you for the opportunity to make a submission on the *National Electricity Amendment (Technical Standards for Distributed Energy Resources) Rule 2020*, *National Energy Retail Amendment (Technical Standards for Distributed Energy Resources) Rule 2020* consultation paper that was issued by the Australian Energy Market Commission (AEMC) on 25 June 2020 (ERC0301).

In June 2020, the South Australian Government published *South Australia's Energy Solution*, a report which details the key challenges that are now emerging from a decade of rooftop solar uptake in the State. This report builds on advice and power system modelling that was undertaken by the Australian Energy Market Operator (AEMO) and sets out several ways in which the South Australian Government will manage these challenges as we transition to net-100 per cent renewable energy.

To achieve this transition, the right mix of interconnection, storage, generation and smart technology to balance supply and demand is required. Distributed energy resources (DER) therefore, will play a crucial role in this transition, as technology continues to change and provide additional services to South Australian customers.

Therefore, the division supports the proposed rule change request submitted by AEMO which seeks to place an obligation on the market operator to make, publish and, if

necessary, amend DER minimum technical standards that will be contained in a new subordinate instrument.

Like AEMO, the division considers it imperative that DER and DER devices have a minimum capability to operate autonomously in a manner that is responsive to network and bulk power system needs. As DER can, at times, form the largest source of generation at periods of time in South Australia, it is imperative that greater control and capabilities are introduced to maximise the value of DER for customers, whilst also supporting energy system reliability and security.

As noted in your consultation paper, DEM is currently consulting on proposed new technical standards for inverters, smart meters and distributed generation to apply in South Australia and assist customers to move to a smarter home.

Recognising that AEMO will undertake its own consultation process concurrent with this rule change process in order to have a first set of minimum technical standards completed and ready for implementation by the time this rule change process is finalised, the division is comfortable with the approach taken by the AEMC that the detail of the minimum technical standard will form part of AEMO's consultation process.

However, the division considers it appropriate that the AEMC consider limitations on the scope of the minimum technical standards being developed by AEMO within the national Rules. These limitations would cover, for example, the breadth of DER and DER devices that fall within the scope of the proposed minimum technical standards – potentially limiting it to DER and DER devices that are connected to Distribution Network Service Provider (DNSP) networks only, including (but not limited to) rooftop solar PV and batteries.

The AEMC should carefully consider whether there is any consumer benefit for the inclusion of other smart-based technologies that are installed and commissioned behind-the-meter in customer premises (such as pool pump controllers and air conditioners), but which fall outside the remit and reach of DNSPs and other market participants. In this instance, the division is concerned that new obligations may be placed on market participants which cannot be enforced.

It is understood that this proposal is an interim solution for DER standards whilst more detailed work is progressed through the Energy Security Board (ESB) and Standards Australia. The division notes that in some circumstances, jurisdictional instruments may already require compliance with Australian Standards relevant to DER. The AEMC is encouraged to consider protections that may be necessary to ensure that duplicative or inconsistent standards do not occur as a result from this framework.



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The AEMC should also consider the management and transitional arrangements of DER and DER devices when the minimum technical specification is superseded by an updated (or alternative) document. The division raises this point, noting that some schemes and networks (such as South Australia's Virtual Power Plant) rely on DER and DER devices as part of their business model and core operations and the process of transitioning DER and DER devices may take some time to implement. In addition, the AEMC should also consider what occurs if standards determined by AEMO (or the longer-term governance body determined by the ESB) are out of step with other standards bodies like Standards Australia. In this instance, would the DER minimum technical standards override standards determined by Standards Australia, or vice versa?

The second part of this rule change request is the consideration of introducing a definition of DER within the Rules. The division recognises the broad range of technologies that fall within the scope of DER, as well as the difference both in terms of scale, maturity and cost that the various technologies are at. However, as noted above, the division is also conscious that the national energy Rules may not offer an efficient regulatory solution for other smart-based technologies that could be included within the scope and definition of 'DER', but which fall outside the remit of market participants in terms of interaction and control. The AEMC's consideration of a definition of DER in the national Rules should consider these issues further.

Recognising that this rule change request is also recommending cyber security-related provisions be considered and introduced, the division is cognisant that in the future, DER and DER devices are likely to communicate with, and interact with, technologies that are not secure. This represents a real security risk that must be managed accordingly by industry and all parties involved with DER and DER devices. Whilst it is appropriate that cyber security-related provisions and requirements are considered and introduced, the division is unclear how cyber security provisions could be enforced under this framework. The AEMC should consider enforcement further on this matter, noting the proposed timeframes for when this minimum technical standard would be introduced.

The division also notes that AEMO is proposing that the Australian Energy Regulator (AER) develop a light-touch monitoring and compliance framework, primarily for the purpose of transparency, as well as placing a requirement on DNSPs to ensure that connected DER meets the DER minimum technical standards through their relevant connection agreements.

It is not clear to the division what compliance expectations are on the DNSPs under this framework. In particular, we note that the DNSP may not have appropriate enforcement powers for particular DER such as smart appliances. The division recommends that the AEMC considers this further, noting DNSPs do not have a relationship with the





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manufacturers and installers of DER and DER devices under the national energy frameworks.

Thank you again for accepting our submission. Should you wish to discuss this further, please contact Ms Rebecca Knights, Director, Energy and Technical Regulation Division, on (08) 8226 5500.

Yours sincerely

A handwritten signature in dark ink, appearing to read "Vince Duffy".

Vince Duffy

EXECUTIVE DIRECTOR, ENERGY AND TECHNICAL REGULATION DIVISION

3/8 / 20