

## **Ausgrid Submission**

AEMC Technical Standards for DER Rule Change  
Consultation Paper

July 2020



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Attn: Mr Alex Oeser  
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Lodged online

Dear Mr Oeser,

Ausgrid is pleased to provide this submission to the Australian Energy Market Commission's (AEMC) Technical Standards for Distributed Energy Resources (DER) consultation paper. We welcome recommendations that lead to improved customer outcomes, particularly those that enable transformation of the energy system and a transition to a low carbon future.

Ausgrid understands the Australian Energy Market Operator's (AEMO's) concerns about managing system security in a highly variable renewable energy world and the challenges already posed by high solar PV penetration. We also appreciate the need for a number of immediate short-term actions to address urgent system security issues in jurisdictions such as South Australia through mechanisms such as voltage disturbance ride-through capability.

Whilst the importance of these issues is recognised, Ausgrid is not supportive of the proposed rule change. The framework proposed is a fundamental and wide-ranging shift in the governance of DER standards, which appears inconsistent with recent industry reviews commissioned by the Energy Security Board (ESB). The proposal will give AEMO responsibility for setting technical standards outside existing national standards frameworks, with a broad scope that encompasses additional devices for which no relevant issues have been defined or articulated.

If customers have confidence in the energy supply system, all investments made by market entities on behalf of customers must be explicitly justified based on what customers value, and decisions should be formulated within a transparent, inclusive and systematic governance framework. In its current guise, Ausgrid does not believe the proposed rule change meets these criteria.

The proposal does not appear to have adequately considered the potential cost impacts on all customers, both as a direct result of changes that may be required to all new and replacement DER devices, but also indirectly through the monitoring and compliance frameworks that networks such as Ausgrid will be obliged to implement.

The framework proposed does not appear to have sufficient safeguards to ensure that all impacted stakeholders, including customers, networks and manufacturers, are adequately represented in the

standards development process. We also note that the proposal appears to pre-empt the outcomes of the ESB's current work on the governance of DER technical standards, which is being concurrently consulted on, as well as running concurrently with consultation that is being undertaken by the South Australian Government on similar topics.

In the short-term, if a rule is to be made, we would prefer a rule that is limited in time, scope and potentially jurisdiction to immediate, short-term system security needs. A firm obligation to consult with customers and stakeholders should be included, in alignment with the protections afforded to them under the national standards. We also believe that any obligations should include the need for AEMO to demonstrate that all costs, including those for compliance monitoring, be robustly estimated, quantitatively justified using a risk-based approach linked to customer value, and independently verified.

In addition to the comments above, our submission provides views on the questions raised in the AEMC's consultation paper. Should the AEMC have any questions in relation to this submission, please contact Alex Moran, Manager – Network Innovation & Intelligence on 02 9269 7205 or [alex.moran@ausgrid.com.au](mailto:alex.moran@ausgrid.com.au).

Yours sincerely

A handwritten signature in black ink, appearing to read 'Junayd Hollis', written in a cursive style.

Junayd Hollis  
General Manager – Asset Management

## Consultation Paper Questions

### 1. Assessment Framework

*Do you agree with the proposed assessment framework? Should the assessment framework include any additional considerations, and if so, what are they and why?*

Ausgrid is supportive of the proposed assessment criteria outlined in the AEMC's consultation paper, however, feel that additional criteria are warranted to ensure an outcome that supports the needs of all stakeholders, especially customers who will likely bear the ultimate cost of any changes.

Customers have advised us that they want to have a say in the future design of the energy system, and that they are willing to act where required to keep the system secure. We suggest that the AEMC consider a factor to assess the ways by which the proposed rule change enables customers to provide input into the development of DER standards.

Distributors such as Ausgrid are required to justify investment decisions to the regulator, customers and key stakeholders. We recommend the assessment criteria consider the costs, benefits and timing, and whether the proposed rule change is the most prudent and right timed option to resolve the issues identified by AEMO.

It may also be appropriate for the AEMC to consider the impact of the proposed rule change on innovation and the development of new products and services. If the AEMC considers it necessary to determine a definition of DER, rather than trying to define DER by asset type, it may be more appropriate to consider the type of service or function that a DER provides. This may help avoid unintended consequences from a definition that is too narrow and fails to pick up emerging technologies, or too wide as picks up technologies that are not really DER.

The proposed framework also has significant impacts for parties outside of the Rules framework, such as manufacturers. We feel it appropriate to consider how this proposal impacts these parties, in order to identify the likely subsequent flow-on impacts, particularly to customers.

## 2. Setting the initial standard and the definition of DER

### *a. Should the initial DER technical standard be set by AEMO?*

Ausgrid have concerns with AEMO setting the initial DER technical standard. In particular, we are concerned about the lack of governance and safeguards in place against divergence from Australian and International Standards. The Australian Standards framework provides clear governance for comprehensive consultative processes with relevant qualified and experienced stakeholders. It is anticipated that the ESB governance process will establish arrangements for the setting of DER technical standards, including the relevant safeguards and consultative requirements.

For AEMO to set an initial technical standard, we recommend that the following criteria are met:

- scope and jurisdiction are tightly defined and limited to identified areas of concern;
- consistent with AS4777.2;
- inclusion of a firm obligation to consult with customers and stakeholders, in alignment with the protections afforded to them under the national standards; and
- inclusion of an obligation to demonstrate that all costs, including those for compliance monitoring, be quantitatively justified using a risk based approach lined to customer value, and that this justification be independently verified.

### *b. Should the minimum standards be inserted into the minimum content requirements of connection contracts, negotiation frameworks and model standing offers or terms?*

Minimum standards are more appropriately set in either AS4777.2 or the National Electricity Rules to ensure transparency and accessibility. This also makes the minimum standards easier to update and ensures they apply immediately as opposed to having to factor in time for DNSPs to have to update their contracts or model standing offers. Currently requirements under the NER, Ausgrid specific requirements and the NSW Service and Installation Rules are called up and required to be complied with in this way. An example of this is clause 9.3 of Ausgrid's Model Standing Offer for Basic Connection Services up to 100 Amps connection low voltage which provides as follows:

#### *9.3 Compliance with rules and standards*

*You must ensure that your electrical professional ensures that the electrical installation and the*

*premises connection assets comply with (as relevant):*

*(a) the requirements of the Service and Installation Rules;*

*(b) the rules, the market operations rules and any applicable metrology procedures made under*

*the rules or the market operations rules;*

*(c) any requirements or standards specified by Ausgrid from time to time to ensure compliance*

*with the rules;*

*(d) Ausgrid's Network and Electrical Standards;*

*(e) any reasonable requirement imposed by Ausgrid before or after the connection is electrified if*

*Ausgrid becomes aware of any defect or other matter or thing that in its reasonable opinion*

*may:*

*(i) cause the electrical installation to be unsafe;*

*(ii) cause the electrical installation or the premises connection assets not to comply with*

*the conditions of this contract; or*

*(iii) cause damage to the distribution system or another customer's electrical installation*

*or equipment;*

*(f) relevant Australian Standards (including AS3000: Electrical Installations).*

Another example of this is clause 6.3 of the model deemed standard connection contracts in schedule 2 of the National Energy Retail Rules which provides:

*6.3 Your obligation to comply with energy laws and our requirements You must comply with:*

*(a) the energy laws relating to the provision of customer connection services we provide to your premises under this contract; and*

*(b) our reasonable requirements under the energy laws, including our service and installation rules. This includes a requirement that you provide and maintain at your premises any reasonable or agreed facility required by us to provide customer connection services to the premises.*

*c. What should the standard apply to and is a DER definition needed in the NER?*

We do not support a specific definition of Distributed Energy Resources in the NER at this point in time. The potential broad scope of this term extending beyond embedded generation systems to also include controllable appliances and their control devices would have far reaching scope implications to setting DER minimum technical standards that we do not believe is well considered in this rule change request.

It may be likely that a DER definition will be required in the rules in the longer term but we recommend that the outcomes from the ESB governance process review for DER minimum technical standards should be completed first.

The NER has definitions for small generating units and different classifications of embedded generators in Chapter 5A including micro embedded generators as defined by the scope of AS4777. These definitions could be used to cover the minimum technical standards required for the major area of concern such as the voltage disturbance ride through capability of inverter energy systems.

If the rule change was to progress, we believe the scope should be limited to embedded generation systems which would include those covered under the scope of AS4777, and minimum technical standards should not be extended to controllable appliances or load control devices at this point in time.

*d. Do stakeholders agree that the standard should only apply to new and replacement devices? Will this meet the objectives of the desired policy outcome of this rule change request?*

Ausgrid agrees that any standard should only apply to new and replacement devices as imposing any new standards would be unfair for customers that have already invested in DER technologies in good faith.

Due to the large penetration of DER in some jurisdictions, and the problems articulated by AEMO, there is a real risk that the objectives of the desired policy change outcome will not be met by this rule change request. It may be appropriate for jurisdictional processes (such as the consultation currently underway by the South Australian Government) provide the

mechanism by which these issues are resolved in the short-term until the longer term ESB governance framework has been implemented.

### **3. Content and direction of the initial minimum technical standard**

*a. Should the scope of the initial technical standard be limited by the NER?*

Yes, Ausgrid believes that the scope of the initial technical standard should be limited by the NER. This will allow immediate system security issues raised by AEMO to be addressed, whilst also continuing focus on the longer-term processes and governance frameworks being developed by the ESB.

*b. If so, should there be arrangements to allow for a review of the scope at a future date?*

Yes, arrangements to allow for a review of the scope at a future date will provide a back-stop if the ESB governance framework is delayed for any reason.

*c. Should the role of AEMO in setting minimum technical standards (the subordinate instrument) be limited in time, with the ESB's governance review outcomes to be introduced into the framework at a later date?*

Given that the ESB's governance review is also currently being consulted on, Ausgrid believes that any proposed subordinate instrument used to set minimum technical standards should be limited in both time and scope and potentially jurisdiction.

We agree with the AEMC's suggestion that any arrangement adopted to obligate AEMO in determining the content of the standard should be transitional until such a time when the ESB framework has been established to replace the one being proposed.

### **4. Applying the standard and monitoring compliance**

*a. How can the proposed solution be applied in Western Australia, Victoria and the Northern Territory?*

Ausgrid has no comment on this question.

*b. Is it sufficient to specify a commencement date for the DER minimum technical standard only and have the implementation dates for the individual components set out in the standard itself?*

Given the potential impacts on manufacturers and suppliers, we consider that as long a timeframe as possible is required in order to allow for appropriate design, specification, testing, manufacturing, distribution and sales processes to occur. This further emphasises the importance of a transparent and inclusive governance framework, which enables the appropriate consultation to occur, resulting in practical and realistic outcomes.

*c. What level of compliance monitoring is needed?*

The level of compliance monitoring should be proportional to the risk being faced. This will differ depending on the jurisdiction, the device, and other mechanisms available to mitigate against the same risks.

*d. Who should monitor compliance with technical standards?*

Depending on the scope of the technical standards, Ausgrid believe that a collaborative approach to monitoring compliance to technical standards is required. This may include jurisdictional regulators, industry associations such as the Clean Energy Council and distribution networks. Any compliance obligations placed on distribution networks should consider the need to clearly articulate the expectations required to ensure that the associated costs can be analysed, assessed and justified to ensure that overarching customer value objectives are met.

*e. How can compliance be enforced?*

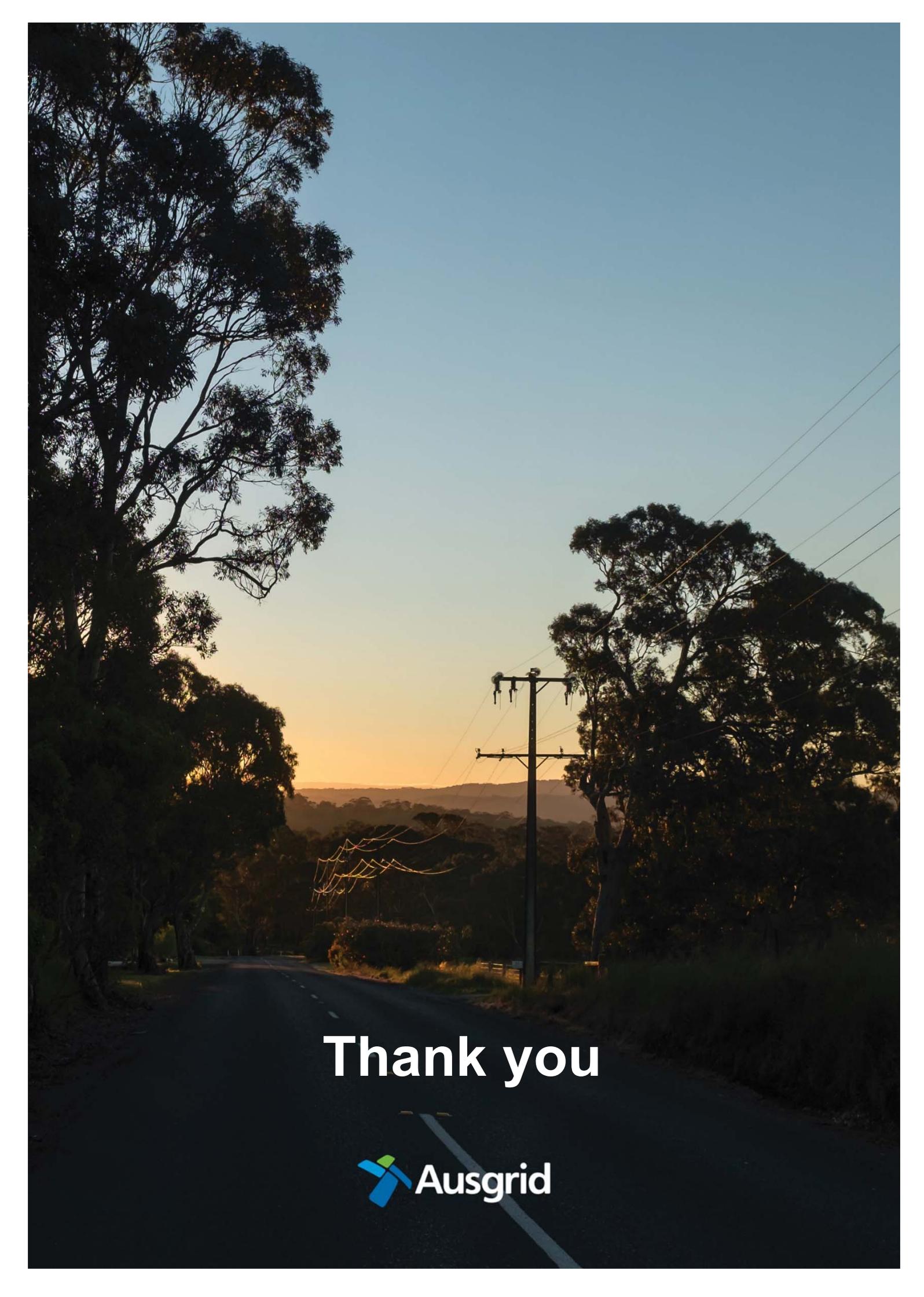
There are a variety of methods that can be used to enforce compliance with a technical standard. Inclusion of technical requirements in agreements such as connection agreements is one method, however, we consider this as a weaker method and do not agree with AEMO's position that this will "bind the manufacturers and installers of DER and DER devices".

We monitor compliance with our safety standards through a number of methods including audit inspections where safety is paramount. Any potential obligation requiring inspection regimes will need to be rigorously tested to ensure that the benefits outweigh the expected costs.

## **5. Cost of the initial standard**

*Considering AEMO's proposed initial standard in section 5.2, Box 1, what are the expected costs and benefits of implementing the initial standard for consumers, other affected parties and DNSPs?*

At the time of writing this submission, AEMO have not yet released a proposed initial standard for consultation and we are therefore we are unable to comment on the potential costs and benefits.

A scenic landscape at sunset. A paved road with a white dashed line runs through the center, flanked by large, dark trees. In the distance, a utility pole with power lines stands against a bright orange and yellow sky. The overall mood is peaceful and serene.

**Thank you**

