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Merryn York
Acting Chair
Australian Energy Market Commission

DRAFT DETERMINATION FOR NATIONAL ELECTRICITY AMENDMENT (TECHNICAL STANDARDS FOR DISTRIBUTED ENERGY RESOURCES) RULE 2020

Dear Merryn,

Energy Consumers Australia appreciates the opportunity to comment on the Australian Energy Market Commission's (AEMC) *National Electricity Amendment (Technical Standards for Distributed Energy Resources) Rule 2020* and *National Energy Retail Amendment (Technical Standards for Distributed Energy Resources) Rule 2020 Draft Determination*.

Energy Consumers Australia is the national voice for residential and small business energy consumers. Established by the then Council of Australian Governments Energy Council in 2015, our objective is to promote the long-term interests of energy consumers with respect to price, quality, reliability, safety and security of supply.

Energy Consumers Australia made a submission on the AEMC consultation paper for this rule change in August 2020, and we have also engaged with the Australian Energy Market Operator (AEMO)¹ and the Energy Security Board (ESB)² on related processes, and the South Australian Government on their Smarter Homes package³.

In this context, we should say at the outset that our assessment approach differs from the AEMC, as laid out in the Draft Determination which is to address "the urgent power system security issues identified by AEMO and stakeholders in relation to the increasing penetration of distributed solar PV generation across the NEM"⁴.

Our primary consideration in any matters that go to the functionality and performance of technologies that consumers have purchased for their home or business – whether these are technical standards for control capabilities (inverters, demand response enabling devices etc), data and privacy, interoperability and communications, or cybersecurity – are consumer outcomes.

In a modern, flexible and resilient energy system, where consumers are both buyers and producers of electricity, the decisions they make to conserve or shift the timing of their energy use or generation has the potential to significantly reduce the overall costs of supply of electricity. For this reason, any actions that would impose external controls over technologies that empower consumers in how they use or generate energy require social licence. Energy Consumers Australia has been exploring this

¹ <https://energyconsumersaustralia.com.au/wp-content/uploads/Submission-to-AEMO-DER-Minimum-Technical-Standards-Issues-Paper.pdf>

² <https://energyconsumersaustralia.com.au/wp-content/uploads/Submission-to-the-ESB-Governance-of-DER-Technical-Standards-Consultation-Paper.pdf>

³ <https://energyconsumersaustralia.com.au/publications/submission-to-the-south-australian-consultations-on-smarter-homes>

⁴ AEMC, Technical standards for distributed energy resources, Draft rule determination, 3 December 2020, p.9.



concept and will shortly release a report on social licence for control of distributed energy resources for discussion with stakeholders, which could be considered.

Notwithstanding our different assessment approach, we are broadly comfortable with the more preferable rule the AEMC proposes in the draft determination because it addresses our major concerns with AEMO's rule change request. However, there is one qualification and that is the proposed reference to an Australian Standard. Throughout the reform agenda on deregulation of the past few decades it is a well-established practice across the Australian economy, to allow for mutual recognition rather than impose Australian standards. As the vast majority of these technologies are not manufactured in Australia and noting there is an IEEE standard for grid inverters and, we understand, there are also European equivalents, we strongly suggest that the AEMC specify either outcomes rather than a prescriptive standard, or allow for mutual recognition of standards.

We appreciate that high uptake of rooftop solar PV systems is presenting challenges to the energy market operation, particularly regarding system security, and we support the need for immediate, short-term actions which can address these concerns, in particular autonomous response to disturbances (voltage ride-through).

We were not however persuaded that AEMO's proposal was the best approach to establishing the technical standards required for empowering consumers to manage and control their appliances and generation and home energy storage assets that from a system view are described as distributed energy resources (DER).

Whereas the rule change request proposed to give AEMO responsibility for an initial set of minimum technical standards for DER to apply from 2020, the AEMC's more preferable rule proposes to update the National Electricity Rules (NER) to include requirements in the relevant Australian Standard AS 4777.2:2015 which is developed through established governance arrangements. The AEMC also proposes to add a new Schedule 5A.2 to the NER, as well as amending existing schedules to deal with the short duration undervoltage and other issues raised by AEMO that are not covered by AS4777.2:2015.

We are also pleased to see that the more preferable rule would align the changes with the changes being made under the South Australian Smarter Homes package to deal with the immediate system challenges, ensuring a level of consistency that is critical for the growing DER market and the households and small businesses who are investing in this technology.

We would encourage the AEMC to ensure the changes under the more preferable rule, are consistent with the new national arrangements for setting DER Technical Standards being proposed by the ESB as part of its rule change request. In our submission to the ESB consultation in August 2020, we made suggestions about how new governance arrangements, which would make the AEMC the decision-maker, can be designed to ensure the perspective of household and small business energy consumers is appropriately considered as part of the process.

Under this prescriptive approach, we note that future updates to AS 4777.2 or the equivalent standards from other jurisdictions will need to be incorporated in the rules. The Draft Determination indicates that the latest published version AS 4777.2:20 – which was released by Standards Australia on 18 December 2020 – will be embedded in the rules. It is not clear whether future updates of this kind would be handled by the AEMC under the new arrangements proposed by the ESB or some other mechanism. It is important that the NER reflects the latest version of the standard and we do not have a situation where rules and standards frameworks are out of sync or the change process imposes a regulatory burden at a cost to consumers.



More broadly, incorporating the DER standards into the NER raises questions about the ability for the standard to be responsive to change in the fast moving DER sector. The transition of the energy system that is underway will require fit-for-purpose technical standards, that can respond to change in a timely way. It would be a suboptimal outcome if changes to the DER Technical Standards can only be made through a lengthy rule change process. The AEMC may wish to consider whether this issue is best considered under this rule change request, or that of the ESB.

Further detail about the consumer perspective that informs our position, and we covered in our earlier contributions to the process, is included at **Annexure 1** for your information.

Should you have any questions about our comments in this submission, or require further detail, please contact Jacqueline Crawshaw, Acting Director, by phone on 02 9220 5520 or by email at jacqueline.crawshaw@energyconsumersaustralia.com.au.

Yours sincerely,

Lynne Gallagher
Chief Executive Officer
Energy Consumers Australia



Annexure 1

There is already more than nine gigawatts of distributed solar generation alone installed in the national electricity market⁵. Assuming the minimum technical standards can be developed and applied in record time, and that noting that AEMO forecasts another three gigawatts will be installed by 2025⁶, this means that three quarters of the anticipated total solar PV installations in 2025 are already on rooftops now and will not be subject to the new requirements. Any new minimum technical standard cannot be easily applied retrospectively and can therefore only have limited effect.

There is vast potential for what the ESB describes as DER services to transform the way that households and small businesses use their appliances, generation and energy storage assets. With the right conditions, consumers can partner with industry to deliver the services needed to both mitigate the risk of future system security issues as well as benefit consumers through lower bills. Minimum technical standards can form part of the future picture, but working with consumers to unlock the potential in the already installed assets will likely be more effective.⁷

As the AEMC noted in the consultation paper for the rule change request, work is already underway in South Australia to address their immediate need to manage security throughout the coming spring and summer, which we understand is a key driver of the need for urgent change. This work is occurring without the need for changes to the national energy rules and is intended to address voltage ride-through. Given this work is already underway to address the most urgent need and without national rule change, we question the need for the proposed rule change at this time. We consider there should be adequate time for the proposed DER Standards Governance Committee to develop the most appropriate standards.

We are keen to ensure that any standard which is designed to provide protections in exceptional and emergency situations does not prevent the development of consumer-centric standards that will support the development of a market in DER services. As the market operator, AEMO has unique insight into the challenges that result from the current rooftop solar PV systems, and would be able to provide essential expertise to guide the development of standards as part of the Energy Security Board's proposed DER Standards Governance Committee.

⁵ AEMO Rule Change Request, p.4. Accessed at https://www.aemc.gov.au/sites/default/files/2020-05/ERC0301%20RRC0037%20Rule%20change%20request%20pending_.pdf

⁶ Ibid.

⁷ Consumers are telling us that they are willing to change their behaviour. The June 2020 Energy Consumer Sentiment Survey shows that around 70-81% of households and 82% of small businesses are willing to respond to requests to reduce their usage and less than 30% would require an incentive to do so.