

29 September 2026

Energy Markets, Energy Policy WA

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RE: Power System Security and Reliability (PSSR) Standards Review

Neoen welcomes the opportunity to provide our comments in response to Energy Policy WA's proposed changes to the Electricity System and Market (ESM) Rules as discussed in the Consultation and Information Papers published on 20 August 2026.

Our main concern remains with the review outcome '2.2 – Settings used to demonstrate Withstand SCR' and a requirement that, unless otherwise agreed with AEMO and the Network Operator, the control settings used to demonstrate Withstand SCR must not differ from the control settings used to demonstrate compliance with other Technical Requirements.

We note the Review Panel has allowed alternative arrangements to be agreed with AEMO and Network Operator, however, the default proposed position on this topic did not change. We strongly believe ignoring the guidance provided in many submissions to this and previous consultations, including Neoen's, that all systems should be set to provide optimal performance for the grid conditions present at the time of connection or reasonably expected in the immediate future, is a move in a wrong direction with potential to destabilise and reduce robustness of the future network. Under the current proposal, the very thing that the Review Panel seeks to improve will very likely be negatively impacted as the newly connected generation responds in a way that is not optimised to support the local network, or may even oppose its needs during normal operations and grid disturbances.

There is no precedent known to us in Australia or world-wide to show that setting generating systems for conditions that are currently not present at their connection point has any benefit to the security or stability of the grid. On the contrary, there are many reasons why this approach should not be implemented—including the ability to conduct site testing to validate model responses and Generator Performance Standards of the generating system. Implementing settings for grid conditions that don't exist (and may never eventuate) will prevent generating systems from validating their modelled responses via site testing as the real system responds differently under real network conditions. The ability of projects to demonstrate their GPS compliance will be diminished if not removed completely.

We would also like to refer to some of our comments made in the previous submissions to the PSSR consultation as highlighted below.

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Creating separate requirements for grid forming inverters

With no specific incentives in the WEM to install or transition existing systems to grid forming technology, the introduction of more stringent or additional requirements for GFM has the potential to deter proponents from making additional investment and adopting the grid forming logic. This will only be detrimental to the power system itself. Instead, the Rules should require IBRs to provide services and perform in a way that is beneficial to the power system and require operation consistent with the specific needs at their connection point. Grid forming IBRs should not be required to operate differently simply because they can.

Misuse of Minimum Standards

Setting specific minimum standards at high performance levels, based on what we assume to be the experience of reviewers rather than scientific research or studies, prevents the negotiation of standards suitable for the location and purpose of a facility. Minimum standards must be defined in a way that allows negotiation with the network owner and system operator while maintaining the security and reliability of the grid. Highly specific requirements should be reserved for Ideal or Automatic levels only.

Minimum voltage phase angle “jump” requirement of 25 degrees

Establishing a requirement to withstand a specific phase angle shift fails to add value and adds unnecessary burden in engineering and assessment, without recognising the conditions that might drive such “jumps”. A phase angle jump of significant magnitude would generally be driven by a particular kind of fault, which is already covered in assessments under multiple disturbance ride-through conditions.

The review of Schedule 5.2 of the National Electricity Rules (NER) established a requirement for vector shift protection not operating for an angle shift less than 20 degrees (S5.2.5.8 (b6), NER version 227 commencing 21st August 2025) which is much more practical than requesting a specific withstand capability especially one that is proposed as a minimum standard.

We also note no evidence was presented to support 25 degrees as a suitable minimum standard as was the case with the previous proposal of 60 degrees. Establishing such restrictive conditions for new generation should be based on operational and scientific evidence. We do not think that IEEE standards, given as the base for the proposed minimum standard, that were developed for and by international bodies are suitable for Australia. Australia’s networks are facing unique challenges not present in many networks in other countries.

It should also be noted that Vector Shift Protection implemented in UK has been banned as it led to spurious tripping and loss of supply. We encourage the Review Panel to investigate the Engineering Recommendation G59/3-3 by Energy Networks Association that prohibited the use of vector shift protection and replaced it with ROCOF requirements, showing that vector shift is not a reliable measure of performance or network conditions.

Current response during and after contingencies

We encourage the review panel not to introduce the requirements for specific rise time and commencement time as a minimum standard. Specific timeframes may vary and require adjustment according to the connection point and use-case. Introducing highly specific requirements in a minimum standard prevents negotiation and undermines the concept of a minimum standard.

Instability detection mechanism

As before, we would like to draw Review Panel's attention to the fact that suitable devices that have been proven to provide useful information to the Network Operator or AEMO have not been developed to fully comply with the NEM guidelines. Before making any new requirements related to this topic the Review Panel should consider a thorough market review of available detection devices and consult with market participants regarding their experiences in implementing and using these devices.

Should you need further information or clarification on any aspect of our submission, please do not hesitate to contact us.

Regards,



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