

Australian Energy Market Commission

Submitted via AEMC Webportal

20 June 2025

Dear AEMC team

**ERC0394: Improving the NEM access standards – Package 2 Consultation Paper**

Akaysha Energy (Akaysha) appreciates the opportunity to provide the Australian Energy Market Commission (AEMC) with a response to the initial Consultation Paper on the Australian Energy Market Operator (AEMO) led rule change on “Improving the NEM access standards – Package 2”. Akaysha is one of the largest developers of utility scale battery storage systems (bi-directional units (BDUs)) registered in the National Electricity Markets (NEM). We work with several original equipment manufacturers (OEMs) and have experience in grid connections both for grid-forming and grid following BDUs.

Akaysha has been engaged in the NEM access standards work throughout the various stages of the work program – both in consulting with AEMO on the initial AEMO design, as well as with the AEMC when consulting on Package 1. In respect of Package 2, Akaysha has not provided comments on the questions related to the obligations on large loads, as these proposed requirements are not directly relevant to us.

In the event that the Draft Determination does consider overlap on some requirements of BDUs and large loads, we will be happy to provide some technical feedback at that stage. Our comments below primarily relate to Question 11 – in respect of the clarification of credible contingency definition for disturbance ride-through. We have also provided comments on the Rod Hughes Rule Change and specific questions on proposed definitions for protection systems.

Akaysha looks forward to continuing to engage with the AEMC on this Rule Change, and we would welcome the opportunity for a follow-up discussion in respect of the proposed changes to credible contingency definitions. For more information on this submission please contact Emma Fagan at [emma.fagan@akayshaenergy.com](mailto:emma.fagan@akayshaenergy.com).

Kind regards

Emma Fagan

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## Akaysha response to AEMC Questions

**Question 3: HVDC links to procure system strength services from third parties. In relation to AEMO's proposal to amend NER clause S5.3a.7 to allow all HVDC links to procure system strength services to meet the short circuit ratio requirement of 3.0:**

- 1. Do stakeholders agree that the NER should be amended to allow HVDC link owners to procure system strength services from third parties? Is the current inability to do so a material problem, or will it become a material problem?**

Generally, Akaysha supports all system strength services being available to be provided from a third parties via non-network solution options. It would be useful for the AEMC to set out in the Draft Determination what the potential size of the procurement opportunity is likely to be, as this will determine whether it is or is not likely to become a material problem. It would also be useful for the AEMC to consider how additional this will be to the System Strength services currently being procured by each system strength service provider (SSSP) and whether a separate procurement process needs to be considered within the National Electricity Rules (NER).

### **Question 6: Conditions for generator protection systems**

- 1. Regarding the proposal to remove paragraph (b) of clause S5.2.5.9: a. Do stakeholders agree that paragraph (b) is redundant and/or misleading, or do stakeholders have a different interpretation? b. Do stakeholders support Rod Hughes Consulting's proposal to remove paragraph (b)?**

Paragraph (b) provides a vital way, under the automatic access standards (AAS), for facilities to efficiently provide protection to a generating system (GS) or integrated resource system (IRS) collector system by appropriate protection grading where redundancy is not needed or would be considered costly. Paragraph (b) reads as a reduction of the requirements of (a) and could perhaps fall under a negotiated access standard as guidance on the considerations. It should be noted that introducing this as a negotiated access standard (NAS) or a minimum access standard (MAS), however, leads to a negotiations and the process of acceptance under 5.3.4A which could be considered burdensome.

- 2. Regarding the proposal to add a new provision in the minimum access standard: a. Do stakeholders agree that the minimum access standard may create risks to power system security because it does not require additional redundancy in protection systems? b. Do stakeholders support Rod Hughes Consulting's proposal to give AEMO and the NSP**

**discretion to increase redundancy requirements in the minimum access standard if required to prevent adverse impacts on power system security?**

- a) Potentially, requirements set out in the NER rules should enable AEMO and NSP to uphold system security and refer to good industry practice.
- b) Clearly defining the responsibilities of AEMO and NSPs in identifying power system security concerns under the Minimum Access Standards (MAS) would enhance transparency and direct more efficient design processes. Any claims regarding adverse impacts to system security would need to be substantiated with appropriate technical justification and by in line with good protection industry practice.

**3. Do stakeholders have any concerns or suggestions in relation to this element of Rod Hughes Consulting's proposed rule? If so, please describe your concerns and any related suggestions and reasoning**

No response at this time.

**Question 11: Clarification of credible contingency definition for disturbance ride-through In relation to AEMO's proposed changes to amend clause S5.2.5.5 of the NER to clarify the scope of contingency events that a schedule 5.2 plant must be able to ride through:**

**1. Do stakeholders agree that the current definition for the types of credible contingencies in relation to disturbance ride-through requirements for schedule 5.2 plant is unbounded/implied to be unbounded and that this presents an issue?**

No, the current definitions are bounded in scenarios and disturbance ride-through requirements. Attempting to bound the requirements further will lead to conservative approaches that offers limited benefits to system operators and over system security.

**2. Do stakeholders agree that arrangements poorly define the types of credible contingencies in relation to disturbance ride-through requirements for schedule 5.2 plant?**

No, contingencies are limited to credible contingencies as defined by the NSP within the NER definition.

**3. Do stakeholders support AEMO's proposed rule to clarify the types of contingency events that a schedule 5.2 plant must be able to ride through?**

No, the proposal increases the types of contingency events that would be required to be assessed and ride-through demonstrated. This will be cumbersome and burden the connection process further while creating greater compliance risk to GS/IRS owners.

**4. Do stakeholders have any concerns or suggestions in relation to this element of AEMO's proposed rule? If so, please describe your concerns and any related suggestions and reasoning.**

Akaysha opposes the inclusion of non-credible contingency events that are routinely reclassified by AEMO in S5.2.5.5 AAS and MAS by reference paragraph (t1) in the general requirements. This drafting poses significant burden on AEMO, NSPs, developers and their consultants to study often unique and complex network scenarios. If the facility is unable to ride-through, this rule change will prevent the GS or IRS from connecting to the network.

The proposed rule will require a GS or IRS to be able to ride through a routinely reclassified (by AEMO) *non-credible contingency event*, in addition to *credible contingency events*. The current S5.2.5.5 requires ride-through of only *credible contingency events* as defined in clause 4.2.3(b) which does not include the reclassification of contingency events described in clause 4.2.3A. Clause 4.2.3A sets out clear and transparent process for the reclassification offering flexibility for AEMO and NSPs to manage system security. Reclassified contingency events are not presently included in the assessment of GS or IRS connections, instead the process for reclassification and its management are performed operationally, through operational system constraints and network advice and are reported publicly through AEMO's obligations.

Including reclassified non-credible contingency events into the connection assessment will be cumbersome in the already lengthy connection process. It would require AEMO to firstly identify those non-credible contingency events that are routinely reclassified, secondly for developers and their consultants to recreate the events to demonstrate the GS/IRS ride-through capability. The non-credible contingency events will likely require unique and complex network studies, it would likely burden AEMO or the NSPs to develop such cases and would be challenging for consultants to recreate the scenarios with limited network knowledge.

Furthermore, the reclassification of non-credible events will evolve continuously as the power system changes, assets age, weather patterns change, leading to change in risk profiles. Attempting to foresee and include all potential reclassified non-credible contingency events at the early stages of the connection process is impractical and unlikely to capture all scenarios. Conversely this could lead to

the identification of scenarios that may never exist, adding unnecessary complexity to the connection process.

If the GS/IRS is required to ride through future yet to be defined reclassified noncredible contingency events, the owners will be exposed to evolving compliance risk, requiring constant notification of the reclassified events and constant reassessment of compliance.

Current drafting of AEMO's proposed rule does not provide a pathway for negotiated performance if a GS/IRS is unable to meet the ride-through requirements for reclassified non-credible contingency events. This rigid approach could prevent viable projects from reaching connection agreements, as there would be no ability to negotiate reduced performance standards. This is particularly concerning, as current operational actions by NSPs or AEMO would typically pre-constrain the generator or take it offline during such rare events, bush fire or weather events etc. These constraints are commercially understood by developers/owners. Akaysha does not agree that GS/IRS should be required to ride-through events under NER 4.2.3A as part of S5.2.5.5, however if the requirement is to be added, it should form part of the AAS requirements and removed from MAS allowing for negotiated performance if the ride-through cannot be met, providing a pathway for connection.

Akaysha is concerned that the proposed inclusion of routinely reclassified non-credible contingency events in clause S5.2.5.5 would create prohibitive barriers for certain connection locations and facilities.

This change would significantly increase the technical and administrative burden associated with connection assessments and elevate compliance risks for GS and IRS. We believe the benefits to system operators and overall system security are limited. Instead, NSPs should retain the flexibility to assess specific network scenarios and, where appropriate, implement targeted solutions such as special protection schemes, run-back arrangements, or coordinated operational responses to address inter- and intra-regional system security concerns.

**Question 13: Extension of time for complex issues in future access standards reviews In relation to AEMO's proposal to amend clause 5.2.6A of the NER to allow flexibility for extending the time limit for completing each review:**

- 1. Do stakeholders agree that the requirement to complete each review within 12 months of the approach paper being published is too inflexible or may inhibit proper analysis and consultation?**

Bounding time for assessment, consultation and consideration to 12 months is sufficient and encourages an efficient process and review within a timely manner.

- 2. Do stakeholders consider that AEMO should be responsible for setting a new date for publication of the final report? Is there an alternative approach that would better address the issue?**

The time should be bound within the NER in order to provide clarity and a clear roadmap for industry on when the next standards review will occur, and when it will be finalised by.

- 3. Do stakeholders agree that AEMO should publish a notice when an extension is needed, outlining the reasons as they may relate to complexity/difficulty, or a material change in circumstances?**

Yes

- 4. Do stakeholders have any concerns or suggestions in relation to this element of AEMO's proposed rule? If so, please describe your concerns and any related suggestions and reasoning**

Akaysha encourages the consultation with a wide range of industry stakeholders. Individual stakeholder experiences can encourage balance debate and consideration of all interests. Akaysha is aware of the time taken to introduce new rules and adapt to the introduction of new technology is slower than the ability of the industry to deliver the new technological advances to market. We therefore encourage frequent and rapid review of rules and regulations to support emerging technologies.