

NER 5.3.4A Webinar – Questions and Answers (Q&A)

This Q&A document has been prepared following the [NER 5.3.4A webinar](#) and brings together responses to questions raised by participants during the session that we were unable to address in the available time. The questions and answers are intended to provide additional clarity on the topics discussed during the webinar and to support stakeholders in their understanding of the [NER 5.3.4A Fact Sheet](#).

If you have any further questions regarding the connections process, we encourage you to contact AEMO at contact.connections@aemo.com.au.

1. How does the framework apply when a plant can meet the automatic access standard (AAS), but conditions at the specific connection point warrant settings that result in performance below the AAS for some clauses?

Under NER 5.3.4A(b1), a Connection Applicant must propose a negotiated access standard (NAS) that is as close as practicable to the corresponding automatic access standard (AAS), having regard to:

- the need to protect the plant from damage,
- power system conditions at the connection location, and
- the commercial and technical feasibility of complying with the AAS.

Accordingly, where a plant is typically capable of achieving the AAS, a lower performance may be appropriate where the connection point conditions indicate that an outcome below the AAS would better deliver a power system outcome.

For example, under relatively weak grid conditions, slower settling and rise times for asynchronous production systems may be appropriate to support stable operation when negotiating performance under NER S5.2.5.13. In such circumstances, achieving the AAS requirements may not deliver the best power system outcome, and a NAS below the AAS may be appropriate, provided it is supported by evidence.

2. How is commercial feasibility balanced against the National Electricity Objective, particularly where electrification may involve higher costs but reduces emissions?

The National Electricity Objective (NEO) considers these trade-offs, and the Australian Energy Market Commission (AEMC) provides [guidance](#) on how this shapes decision-making.

AEMO and Network Service Providers (NSPs) have a primary responsibility under NER clause 5.3.4A to ensure that a NAS is set at a level that will not adversely affect power system security, achievement of the system standards or quality of supply for other network users.

3. How should model performance issues be addressed during negotiations?

The Power System Model Guidelines (PSMG) require models to accurately represent plant performance. Where model performance issues are identified, AEMO, the NSP, the Connection Applicant and the Original Equipment Manufacturer (OEM) should work collaboratively to understand the cause and resolve the issue. This may involve additional studies, model validation activities, tuning or updated models to improve the representation of plant behaviour.

4. Does the approach to considering future projects align with a specific project commitment status in the Generation Information workbook?

The assessment performed by the NSPs' and AEMO takes into account existing power system conditions, considered projects, projects that have an existing connection agreement and projects that are reasonably considered to connect to the power system.

There is no direct one-to-one mapping to a specific [Generation Information](#) commitment status.

Key considerations are whether a generation project has an existing connection agreement or can be reasonably expected to connect within the near-term planning horizon.

For example, projects reasonably expected to connect may include those that have received their NER 5.3.4A letter and are expected to connect within the next two years. NSPs will also be able to advise which projects to consider.

5. What is meant by “evidence-based”?

Under the NER 5.3.4A framework, proposed NAS should be supported by clear, targeted evidence demonstrating why the proposed standard is appropriate and as close as practicable to the automatic access standard.

The evidence required will vary depending on the proposed access standard, but may include simulation studies, OEM information and evidence of the commercial and technical feasibility of achieving a higher level of performance. Connection Applicants should clearly demonstrate how the evidence supports the proposed access standard and why a higher performance outcome is not reasonably achievable.

Where AEMO or the NSP considers that a proposed NAS is unsuitable, clear reasons must be provided, including the performance concerns identified, any additional information required and, where possible, pathways to address the issue. This helps facilitate transparent and collaborative negotiations.

6. Are there prescribed timeframes for providing information during collaborative negotiations?

The assessment timeframes prescribed in NER 5.3.4(d) and 5.3.4(e) do not commence until a proposed NAS and all required supporting information have been submitted. As a result, delays in providing information may delay the assessments by AEMO and the NSP.

Consistent with the principles outlined in the NER 5.3.4A Fact Sheet, Connection Applicants, NSPs and AEMO are encouraged to engage early, communicate transparently and provide high-quality, targeted information in a timely manner. This helps support efficient negotiations and informed decision-making.

7. What constitutes an adverse impact? Please provide an example.

A plant's performance has an adverse impact on power system security if it impedes AEMO's ability to maintain a satisfactory operating state and secure operation of the power system.

For example, if the reactive power exported from a solar farm at night results in a 2% increase in voltage, this would be an adverse impact if it could prevent AEMO from operating a part of the power system below 110% of nominal voltage or prevent a connection point from being operated within 5% of the target voltage.

Refer to Section 4.4 and Appendix C of the [R1 Capability Assessment Guideline](#) for further information and examples of adverse impacts.

8. When AEMO or an NSP identifies a recurring issue involving an OEM, can it notify relevant stakeholders so that each project does not need to resolve the same issue independently?

AEMO and NSPs do not typically issue notifications that resolve a common OEM issue for all future projects.

AEMO and NSPs seek to leverage learnings from previous projects, including experience with OEM equipment, models and firmware versions. To support this, Connection Applicants are encouraged to engage early with AEMO and the NSP through mechanisms such as Pre-Application Support Services, NER 5.3.9 scoping and collaborative negotiations. These engagement opportunities enable known issues, lessons learned and potential mitigation approaches to be identified and discussed early in the process.

In addition, the Early Assessment Framework (EAF) allows OEMs to have their models assessed by AEMO for general model robustness and accuracy outside a specific connection project. Identifying and addressing model issues early can help streamline both new connection and alteration assessments.

9. Does AEMO expect these reforms to materially reduce performance standard negotiation timeframes? If so, what key performance indicator or reduction in time is being targeted?

The reforms are intended to reduce avoidable delays through early engagement, clearer expectations and better-quality evidence.

While negotiation timeframes will continue to vary based on project complexity and the quality of information provided, AEMO's connection process scorecard will provide transparency across key stages of the connection process and help track efficiency improvements over time.

The objective is to enable a more effective and efficient negotiation process, rather than to achieve a specific reduction in negotiation timeframes.

10. Questions about utility-scale battery energy storage systems (BESS)

- **Are there particular performance standards for which AEMO continues to observe recurring issues in utility-scale BESS projects?**

AEMO does not generally see recurring issues with a single performance standard across all utility-scale BESS projects. Access standard negotiations are generally driven by factors such as network conditions at the proposed location, plant and control design and interactions with other plant. Some technical requirements, such as disturbance ride-through capability, may require more detailed assessment, but outcomes are determined on a project-specific basis.

- **As the deployment of grid-forming BESS increases, does AEMO anticipate changes to how performance standards are assessed under NER clause 5.3.4A?**

AEMO does not anticipate changes to the negotiation framework under NER 5.3.4A as grid-forming BESS deployments increase. The principles of evidence-based, fit-for-purpose assessment and collaborative negotiation will continue to apply when assessing proposed NASs.

However, AEMO and industry are reviewing the underlying technical requirements through the [grid-forming access standards review](#) workstream. This may lead to future changes in technical performance expectations or guidance, while the negotiation framework itself is expected to remain unchanged.

11. Questions about Pre-Application Support and the Early Assessment Framework

- **Will NSPs be required to implement the Pre-Application Support Services process?**

The Pre-Application process is voluntary and is intended to facilitate early engagement between Connection Applicants, NSPs and AEMO.

The [Pre-Application Support Services Guideline](#) outlines the range of support services that may be offered by NSPs and AEMO. It provides a structured framework to help Connection Applicants identify and address potential connection issues early in the process.

- **What is the difference between Pre-Application and the Early Assessment Framework?**

Both services are optional. However, they are designed to address different objectives and stakeholder needs.

Pre-Application Support is designed for Connection Applicants and is project-specific. It enables early engagement between the Connection Applicant, NSP and AEMO to discuss the proposed project, including performance standards, modelling studies, Dynamic Model Acceptance Test (DMAT) requirements and other connection-related matters before a formal application is submitted.

For further information on Pre-Application Support Services, refer to [AEMO | Pre-application](#).

The EAF is designed for OEMs and is not project-specific. It provides an upfront assessment of OEM models and supporting documentation, independent of any connection application. Its focus is on model quality and robustness, helping to reduce duplicated assessments across projects and improve the quality and efficiency of future connection application submissions.

For further information on the EAF, refer to [AEMO | Early Assessment Framework](#).

- **Does the EAF involve staged submission of PSS®E studies, followed by DMAT studies and then the full suite of studies, rather than submission as a single package, to enable earlier feedback?**

The EAF is not intended to introduce a staged connection application assessment process. Instead, it allows OEM models and supporting documentation to be assessed before they are used in a connection application, helping to identify and address model issues and documentation gaps early.

Connection applications may benefit from work completed through the EAF, reducing duplication and potentially avoiding the need to repeat certain non-project-specific DMAT assessments. However, project-specific studies and assessments remain necessary through the normal connection process, as the EAF does not assess site-specific network conditions, project design or performance requirements at a particular connection point.

The EAF should therefore be viewed as a non-project-specific pre-assessment that enables OEMs to validate their models with AEMO before they are used in connection applications to support a more efficient connection process.