Early Assessment Framework Webinar - Question and Answer (Q&A)

This Q&A document has been prepared following the Early Assessment Framework webinar and brings together responses to questions raised by participants during the session which 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 Early Assessment Framework Draft Guideline.

If you have any further questions regarding pre-application, we encourage you to contact AEMO on contact.connections@aemo.com.au.

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1. **Will AEMO contracts for these services include confidentiality provisions?**

Yes, the standard Terms & Conditions can be found at EAF Consulting Services Online Conditions

If there's something missing from these conditions, please reach out via contact.connections@aemo.com.au and we will discuss further if we can accommodate.

2. **Will AEMO be publishing the standards that the models are certified against?**

No, the standards that the model are certified against are based on the published DMAT and PSMG.

3. **As a part of model quality checks, would you check against CIGRE/IEEE DLL wrapper approach?**

We do not assess this approach directly; however, as stated in PSMG section 4.3.12, AEMO prefers the CIGRE JWG B4.82/IEEE wrapper method for EMT model DLLs. The main check of the submitted model structure is based on the criteria outlined in the minimum format requirements for EMT models found in PSMG section 4.3.12.

4. **Managing Model Updates**

- **If there is a list of EAF certified models, how will AEMO deal with minor or major model updates? Or same model but .dll updates?**
- **How will the minor model version changes and major updates will fit in the EAF, especially with OEMs that release model versions often?**

- **What is the proposed approach to integrating or linking the EAF with firmware updates, particularly given that firmware changes are currently being considered under clause 5.3.9?**

AEMO will record all updates relevant to model and firmware traceability in an EAF model version control & change log with the support of OEM.

Our approach will always be to adopt a minimal assessment approach to re-certification, especially for minor updates that don't impact performance. We would start by having a discussion with the OEM to understand the change, then agree a reduced set of assessments (i.e. a subset of the full EAF assessment) to validate the change.

Further details can be found in Section 3.7 of the draft guideline.

5. Short Circuit Ratio (SCR) and X/R Ratio

- **Will there be a standardised SCR and X/R range? Or will the proposed values from the OEM be published? Otherwise, some OEMs may nominate "easy" values compared to another OEM nominating realistic "difficult" values?**

- **Does EAF assess minimum SCR / Weak-grid operating envelope?**

We have not prescribed a standardised SCR and X/R range, but our recommendation is to test at SCR equal to or lower than 3.0. We will check the model capability operating at very low SCR based on the withstand SCR assessment methodology in the System Strength Impact Assessment Guideline (SSIAG).

The X/R ratio range is consistent in the DMAT guideline (3 and 14). The EAF certificate might not be valid if the project-specific SCR is lower than the tested SCR in the EAF.

6. Does the EAF certificate on some OEM plants need re-assessment after 5.3.9 updates

The S5.3.9 updates may be implemented for project-specific purposes. There is no automatic trigger to perform an EAF reassessment if a project using an EAF certified model goes through the 5.3.9 process. Reassessment of the model within the EAF is typically initiated by non-project-specific factors, such as model version updates for bug fixes, performance enhancements, or the integration of additional features or functionalities.

The EAF may be used to support plant undergoing the 5.3.9 process, such as a global firmware update that impacts performance. In this scenario, non-site-specific assessment would be performed on the new model version under the EAF, allowing the 5.3.9 scope for individual projects to focus on site-specific assessments. Further information is available in section 3.7 of the EAF guideline.

7. Generic Plant Model

- **Is it necessary to provide a generic plant model? OEMs typically only provide generic device models (PPC/inverter).**

- **Why is the generic plant model used in the course of the EAF not fully defined & harmonized by AEMO but instead defined for each OEM model certification (differently?)**

To check the robustness of the model and maximum the benefit of the EAF outcomes, generic plant models are assessed in the EAF similar to the assessment in a project model used in the connection application.

As the EAF is intended to be used to support projects that the OEM is targeting, we want to ensure the EAF will be as close to these target projects as possible. It's not the intent of the EAF to compare products/models side-by-side.

Further details can be found in Section 3.2 of the draft guideline.

8. **Will the EAF Assessment will be conducted only by AEMO or conducted by other consultants that will share results for AEMO to approve those models?**

The EAF assessments are performed by a **dedicated specialist team** within AEMO with extensive experience in power system modelling. However, ff an OEM has engaged a consultant to perform studies required in the EAF, then AEMO will seek to leverage these studies (i.e. undertake spot checks, rather than re-running all the studies).

Further details can be found in Section 4.2 of the draft guideline.

9. **How will AEMO promote the EAF to prospective investors?**

Models which have gone through the EAF will receive an EAF certificate detailing the findings and stating the model meets certain quality standards, supporting more informed investment decisions.

AEMO will continue to promote the recognition and benefits of the EAF with NSPs and developers and investors. This includes optional knowledge sharing sessions hosted with OEMs after EAF certification, sharing learnings with NSPs, developers and prospective investors.

10. **What are the minimum mandatory tests? Will AEMO publish the test for with certification and without certification?**

The minimum mandatory test list is referring to the Table 22 in the DMAT guideline. The DMAT tests required in the connection process are published in the DMAT guideline. AEMO are not intending to publish a separate test list for the OEM models with certification. AEMO currently accepts reduced site-specific DMAT assessments (minimum mandatory test list) in connection applications for mature models. Models that receive EAF certification will be treated as mature models, and AEMO will accept reduced site-specific DMAT assessments in connection applications that include these models.

11. **Definitely, the EAF process will reduce the timeline. However, how will the AEMO Performance Standard assessment team be trained on these models to achieve better outcomes and meet a more realistic timeline?**

During the EAF, AEMO will record non-critical issues and their explanations in a report attached to the EAF certificate. The OEM may share this with relevant stakeholders to support connection application submissions to AEMO and NSPs. With the OEM's permission, the certificate and report may also be shared with AEMO connection engineers to reduce the model-related queries during the connection process. An optional service

of knowledge sharing webinar can be co-hosted with the OEM to share the knowledge with AEMO connection teams and NSPs.

12. Has the EAF been trialled with the NSP & OEM to see how this would work in practice?

To-date, one EAF certificate has been issued and is being recognised across multiple projects by one NSP to reduce the scope associated with the R1 Capability Assessment process.

We are still in the early stages of having projects in the right stage to utilise the EAF certificate, though we're proactively having conversations with NSPs to ensure they understand the application.

13. Will the current check list for connection application / R0 be updated and modified with minimum requirements? If yes, when does AEMO plan to issue them with integration of EAF?

The checklist would remain same since DMAT would still be required to be included in the connection application currently. The difference is that AEMO would accept reduced DMAT (minimum mandatory site-specific tests) with an EAF certified model.

14. Which stakeholders in the project should contact and pay AEMO for EAF certification? Proponents or OEMs?

EAF service costs will be recovered using a fee-for-service arrangement under a standard contract between the OEM and AEMO (direct).