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EPWA CONSULTATION: ESSENTIAL SYSTEM SERVICES FRAMEWORK REVIEW CONSULTATION PAPER

Synergy welcomes the opportunity to provide feedback on Energy Policy WA's (**EPWA's**) *Essential System Services Framework Review Consultation Paper* released on 10 November 2025 and the *Addendum to the Essential System Services Framework Review Consultation Paper* published on 20 December 2025 (collectively referred to as the **ESSFR Paper**). Synergy understands that the Coordinator of Energy (**Coordinator**) has undertaken a review of the Essential System Services Framework (the **ESSF Review**) as required under section 3.15 of the Electricity and System Market Rules (**ESM Rules**). The ESSF Review aims to determine whether the Essential System Services (**ESS**) standards and requirements are consistent with the State Electricity Objective (**SEO**) and is the first review under section 3.15 of the ESM Rules since commencement of the new Wholesale Electricity Market (**WEM**) on 1 October 2023.

Synergy provides its overarching comments below, along with feedback to the questions within the ESSFR Paper in Attachment 1.

1 RATE OF CHANGE OF FREQUENCY

The ESSFR Paper sets out a proposal to increase the Rate of Change of Frequency (**RoCoF**) Safe Limit from 0.25 Hz per 0.5 seconds to 0.75 Hz per second (**Proposal 3**). The ESSFR Paper outlines that increasing the RoCoF Safe Limit could reduce the occurrences (and the associated costs) of market interventions by the Australian Energy Market Operator (**AEMO**) directing the commitment of synchronous generators to provide system inertia.

As highlighted in Table 5 of the ESSFR Paper, the costs associated with the RoCoF Control Service (**RCS**) decreased significantly at the end of the 2024 year following the commencement of the *Wholesale Electricity Market Amendment (FCESS Cost Review) Rules 2024* (**FCESS Rules**). One of the key changes implemented under the FCESS Rules was amendments to the RCS market which in essence made the RCS a free service, with Market Participants only being paid if their facility is directed by AEMO to provide RCS.

Synergy acknowledges that prior to the commencement of the FCESS Rules on 20 November 2024, there were inefficiencies in the RCS market which manifested in over procurement of RCS and resulted in excessive costs to Market Participants. However, Synergy notes that the current design of the RCS market (implemented by the FCESS Rules), has led to the need for numerous market interventions by AEMO. The design of the RCS market is such that the provision of RCS

is not optimised within the WEM Dispatch Engine (**WEMDE**) and any potential RCS shortfalls are addressed via AEMO directions.

Therefore, although increasing the RoCoF Safe Limit may lead to reduced requirement for the AEMO to intervene to address RCS shortfalls, Synergy proposes that ultimately, to lessen the burden on the AEMO, a redesign and reinstatement of the RCS market is required, which also provides a forward signal for investment. The redesigned RCS market must appropriately compensate Market Participants for the RCS provided by their facilities concurrent to normal operations and include decommitment signals to minimise unnecessary over procurement of RCS and mitigate against factors that resulted in previous inefficiencies and excessive RCS costs within the WEM.

Synergy notes that the current design of the RCS market (implemented under the FCESS Rules) allows Market Participants to recover costs for the provision of RCS when directed by AEMO. However, it does not create signals for market investment which Synergy considers are necessary to minimise costs in the long term. Without appropriate investment signals, proponents seeking to build or augment facilities in the South-West Interconnected System (**SWIS**) are disincentivised from exploring the potential for their facilities to provide inertia (or synthetic inertia) and which is likely to result in inefficient investments and higher costs in the longer term.

2 METRICS FOR MONITORING FREQUENCY CO-OPTIMISED ESSENTIAL SYSTEM SERVICES PERFORMANCE

The ESSFR Paper notes that the ESM Rules (clause 3.15.2) requires the Coordinator (with the AEMO's support), to determine and publish a set of metrics to be used for ongoing monitoring of ESS.

Synergy considers that the proposed metrics and targets for monitoring ESS within the ESSFR Paper appear reasonable as an initial starting point. Synergy suggests that the monitoring program should also consider allowing, where appropriate, the AEMO to undertake high level analysis to understand the underlying causes of unexpected events or the emergence of unfavourable trends should these eventuate.

3 CONCLUSION

Synergy commends the Coordinator on the efforts undertaken thus far through the ESSF Review towards ensuring ESS requirements are set at the right level for security and efficiency within the WEM

Synergy thanks EPWA for its work to date on the WEM reform program and looks forward to EPWA's continued consultation on market reform matters.

Your sincerely



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ATTACHMENT 1: RESPONSES TOWARDS THE PROPOSALS IN THE ESSFR PAPER

Proposal 1

AEMO to update and publish the technical and operational guidelines relating to FCESS quantification and dispatch processes: ESS Quantities WEM Procedure, DFCM process, RTFS process, and SESSM documentation.

Questions	Responses
Do stakeholders support the proposal for AEMO to update and publish these technical and operational documentation?	<p>Synergy supports this proposal and looks forward to this body of work going a long way towards providing improved clarification and increased confidence for Market Participants in the FCESS quantification and dispatch processes.</p> <p>Under this work program, Synergy notes that care should be taken to mitigate against duplication of content while ensuring consistency of interpretation and use of defined terms within the FCESS guidelines and related documents (e.g., WEM Procedures and ESM Rules).</p>
Do stakeholders consider there is additional documentation pertaining to the ESS requirements and processes that is missing or require review?	<p>Synergy believes that a summary document that sets out relationships between the FCESS technical and operational guidelines and related WEM procedures or guidance documents would be beneficial to aid navigation between the various documents.</p>

Proposal 2

AEMO to review the inputs, parameters and assumptions for the DFCM and test whether they should be updated to reflect current system conditions, and drive relevant and correct outputs.

Questions	Responses
Do stakeholders support the proposal for AEMO to review the inputs, parameters and assumptions for the DFCM?	<p>Synergy supports this proposal. Additionally, depending on potential cost impacts, Synergy suggests that the DFCM model could be made public, subject to removal of commercially sensitive information, to provide the opportunity for market and/or technical analysis.</p>

Proposal 3

Increase the RoCoF Safe Limit from 0.25 Hz per 0.5 seconds to 0.75 Hz per second to reduce the need for AEMO interventions.

Questions	Responses
Do stakeholders support the proposal to increase the RoCoF Safe Limit from 0.25 Hz per 0.5 seconds to 0.75 Hz per second to reduce the need for AEMO interventions?	<p>From an initial high-level review, Synergy considers that its fleet will likely incur increased wear and tear from this RoCoF change. However, at present Synergy does not expect critical adverse impacts to its fleet and therefore, does not disagree with this change to the RoCoF Safe Limit.</p> <p>Synergy notes that the ESSFR Paper does not provide any guidance on likely implementation if this proposal is supported and seeks clarification on the planned commencement date for the change to the RoCoF Safe Limit.</p>
Do stakeholders have supporting documentation to demonstrate that the proposed increase to the RoCoF Safe Limit may endanger existing Facilities?	<p>Synergy will continue to monitor RoCoF events alongside the performance of its fleet and will undertake additional modelling and analysis if required following RoCoF events. Synergy notes that the Generator Performance Standards (GPSSs) for some of its facilities contain trigger events. As such, Synergy may be required to update the Registered Performance Levels in the GPS for selected facilities after further observations of the facility's performance subsequent to the RoCoF Safe Limit change.</p>

Proposal 4

AEMO to implement a monitoring program over a twelve-month period to track the amount of headroom and footroom available from unaccredited Facilities or non-dispatched FCESS Facilities to better quantify MPFR availability to assess the level of Contingency Reserve Raise and Lower that could be provided from the inclusion of the MPFR.

Questions	Responses
Do stakeholders support the proposal to establish a twelve-month monitoring program for AEMO to track the amount of headroom and footroom available from unaccredited Facilities or non-dispatched FCESS Facilities?	<p>Synergy is supportive of this proposal provided that the costs of the monitoring program are not expected to be significant costs, noting that these costs will ultimately be passed on to customers within the SWIS.</p> <p>Synergy also suggests that care needs to be taken to ensure assumptions derived from the monitoring program's results are not overly optimistic or generalised. The following are some factors, though not an exhaustive list, that Synergy considers should be taken into consideration when interpreting the results of this monitoring program:</p> <ul style="list-style-type: none">• Facilities do not receive compensation for providing MPFR and hence are not obliged to consistently deliver a sustained level of MPFR service.• There may be situations when circumstances at a facility site necessitate for MPFR to be turned off; noting that Market Participants have no obligation to communicate or inform AEMO when such situations arise.• The level of MPFR service a facility can provide will differ depending on circumstances, including its operational state.• Accreditation levels and parameter within each facility's GPS need to be considered. <p>Lastly, Synergy proposes that consideration, supported by cost-benefit analysis, should be given towards establishing a mechanism for long-term monitoring of facilities that are considered critical to the overall Power System Security and Reliability of the SWIS.</p>

Proposal 5

Assess the suitability of synthetic inertia (RCS) from BESS in complementing synchronous inertia from rotating machines, and consider potential barriers and suitable incentivisation for grid-forming BESS to provide such services.

Questions	Responses
Do stakeholders support further analysis and assessment by AEMO to assess the suitability of synthetic inertia from BESS in the WEM?	<p>Synergy prefaces its response with the comment that assessment of the suitability of synthetic inertia from BESS in the WEM needs to be undertaken with system security at front of mind and cognisant that synthetic inertia may not resolve all system security issues that could arise with the removal of conventional generation-based inertia.</p> <p>Nevertheless, Synergy supports this proposal and considers that a standard with performance measures and minimum technical requirements for synthetic inertia should be established to guide the assessment of whether, and to what extent, synthetic inertia is suitable to complement traditional inertia in the WEM. Synergy also suggests that the performance measures within the standard should consider speed of response alongside the amount of MWs to be provided.</p>
Do stakeholders support further investigation to better understand the incentives required to support this?	<p>Synergy supports further investigation into the incentives that would be required to encourage the provision of synthetic inertia by grid-forming BESS within the WEM.</p> <p>Furthermore, Synergy considers that the investigations of any required incentives for inertia should be undertaken to with the intent to establish technologically agnostic incentives for the provision of inertia within the WEM. Investigations into potential future providers of inertia should consider alternative options, such as conventional synchronous condensers, as well as grid-forming BESS, and also be consistent with the SEO.</p>